Challenges of International Co-operation in Competition Law Enforcement

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This report was first presented at the May 2014 Council Meeting at Ministerial Level in the framework of the OECD Initiative on New Approaches to Economic Challenges (NAEC).

At the time this report was prepared, an update and possible expansion of the 1995 Recommendation of the Council concerning Co-operation between Member Countries on Anticompetitive Practices affecting International Trade (1995 Recommendation) was under consideration by the Competition Committee.

In light of the Committee work on the 1995 Recommendation and the findings of the present report, the OECD Council adopted on 16 September 2014, the 2014 Recommendation concerning International Co-operation on Competition Investigations and Proceedings, which replaces the 1995 Recommendation.
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Executive summary

Competition law enforcement exists to preserve the integrity of free markets, undistorted by anti-competitive conduct. More vigorous competition has two main benefits: first, it protects consumers from companies that may, at times, seek or use market power to raise prices or reduce outputs. Second, it promotes productivity growth, largely by imposing stronger rivalry among companies to succeed in gaining the business of customers, which in turn leads to faster economic growth.

The past decades have witnessed a rapid globalisation of economic activity which has significantly changed the outlook of the world economy. Globalisation results in large economic benefits but also raises challenges for competition authorities, who must respond to anti-competitive conduct and mergers whose effects are increasingly cross-border.

Historically based within OECD countries, competition law has also gone global in the last 20 years. There has been more than a 600% increase in the number of jurisdictions with competition law enforcement since 1990, from fewer than 20 to about 120 today. This is a major policy achievement of the last 25 years, to which the OECD and its Competition Committee have greatly contributed.

Many competition law cases have an international dimension, and the number is rising rapidly, perhaps partly as a consequence of increasing international trade and the growth of global supply chains. Some evidence of this trend:

In recent years, more than 90% of fines against cartels by the US authorities have been international. The number of cartel cases investigated in the European Union involving a participant from outside the EU has increased by more than 450% since 1990.

Mergers and acquisitions inherently involve cross-border dimensions when merging companies are global operators with a geographical overlap. Mergers and acquisitions with a cross-border dimension have increased about 250%-350% since 1990. Most of these transactions are subject to competition law review by multiple competition authorities.

The third area of competition law enforcement - abuses of dominant market positions - is not systematically examined in this paper, but is an area in which well-known substantive disagreements over enforcement exist, creating scope for international friction.

Significant efforts have been made to ensure that jurisdictions adopt common principles and tools for the analysis of anti-competitive conduct and mergers. Today, despite the different wordings in national competition statutes, most authorities agree on what should be the goals of competition law, on the principles underpinning a sound competition policy, and on the appropriate tools to investigate and assess business conduct and transactions.

Because an increasing number of antitrust cases have a cross-border dimension, effective co-operation between competition authorities is increasingly important. Co-operation has also improved because of the increasing number of co-operation
agreements between competition authorities. These agreements are typically bilateral, with the most significant exception being the European Union’s network for co-operation between competition authorities. A few competition authorities — such as those in the US, EU, Canada, Japan, the Republic of Korea and Australia — co-operate frequently, mainly with each other, but most other authorities have very little experience of co-operating on enforcement cases. Even the closest bilateral arrangements make no provision to recognise the interdependency of decisions, and lack any formal mechanisms to avoid inconsistency. Rather, they are essentially information-sharing tools.

Global mergers present a particularly complex challenge. Competition authorities can impose harmful externalities on one another’s economies if the authorities disagree about the effects of a global merger — for example, because those effects genuinely differ across countries, because the laws differ or simply because of a difference in the assessment of facts or because competition authorities in countries that would be harmed are powerless to act against the source of the competitive restriction located in other economies. Furthermore, because a decision to block by a large jurisdiction is effectively a veto on a global merger, mergers involving the largest global companies will likely become increasingly difficult, as multiple separate approvals are required and the merger must satisfy the most cautious of the investigating authorities. Administrative costs from multiple parallel investigations are high for businesses and authorities alike and delays to closing deals can create a variety of costs for business.

Similarly, global cartels might face parallel investigations, with some jurisdictions much better able to prosecute in practice price-fixing behaviour than others. When the cartel has effects in one jurisdiction, but several of the firms involved are headquartered elsewhere, enforcement might be patchy and inconsistent. In some cases, absent co-operation from a foreign jurisdiction or a leniency application, a competition authority will not be in a position to investigate and prosecute a global cartel.

The harm from failure to co-ordinate can be substantial. They include (1) inconsistent international treatment of the same merger, which could sometimes mean blocking an otherwise harmless and efficient merger or permitting a merger deemed harmful by certain jurisdictions; (2) refusal of requests to co-operate that impact the ability of competition authorities to enforce their national laws; (3) repeated provision of duplicative and potentially excessive amounts of information to multiple jurisdictions. Since 1995, merger deals affected by divergent jurisdictional decisions had a deal value of approximately USD 100 billion. Annual administrative costs from multiple merger filings of a complex transaction can easily exceed in total several millions USD. Inability to detect global cartels could account for damages to consumers that, for some cartels, could exceed USD 100 million.

Although co-operation has increased over the last 20 years, the need for co-operation is perhaps increasing still faster, for two reasons. First, business is more globalised than it was, and there is still considerable scope for further economic integration. Secondly, there are more competition authorities (because there are more jurisdictions with competition laws) than there were, so the complexity of co-operation — which we measure by the number of pairs of authorities needing to co-operate — has increased substantially: by 53 times since 1990, for cartel cases, for example. The implication is that the number of competition cases with an international dimension will continue to grow very rapidly, even if the spread of competition laws now levels off as almost all major economies have competition authorities in place.
Techniques for bilateral co-operation have improved since the mid-1990s, thanks in part to the efforts of the OECD and other international bodies, as well as the increased work by the authorities themselves. Continuing, and deepening, the existing system of bilateral co-operation is important. However, making it work will be increasingly complex, as business becomes ever more globalised, spanning more and more jurisdictions enforcing competition law. In the face of this challenge, governments may want to consider whether new approaches to international co-operation in enforcing competition law are needed.
1. Introduction

More jurisdictions than ever before are applying competition law. Although the words in the law, the substantive elements of the laws vary to some extent, and procedures vary even more, the different regimes are remarkably similar. Common elements include prohibitions against cartels, review of mergers based primarily or exclusively on their effects on competition, and an ability to take action against firms with market power that behave anti-competitively. The dissemination of competition laws and competition enforcement authorities is an extremely positive development overall to which the work of the OECD Competition Committee has greatly contributed. Individual jurisdictions newly applying competition law, businesses based in longer-established competition jurisdictions and the world economy as a whole have all significantly benefitted from this development. Competition law is a key to preserving benefits of market operation at all steps in the global value chain. It protects the global value chain from the effects of restrictions on competition that raise market power and inefficiently increase costs down the value chain.

However, while international trade has increased dramatically since 1990, the enforcement of competition law has remained primarily a domestic exercise. The increasingly cross-border dimension of business activities, together with the increase in the number of competition authorities creates additional complexity for cases with a multi-jurisdictional element. This complexity creates challenges for the effective and consistent enforcement of competition law. This note discusses these challenges, particularly the complexity of multiple authorities investigating the same international cartel or merger. Past discussions of the problems of multi-jurisdictional impacts often focused on the duplication of administrative costs. This paper has a different focus: on the likelihood, impacts and costs of disagreement, and on the complexity of coordination, when different jurisdictions investigate essentially the same matter. Mergers and cartels are the subjects of this discussion note, but many similar points would also arise for investigations featuring alleged abuses of dominance.

The paper identifies some of the policy options to address the challenges discussed in the paper and that have been put forward in the on-going debate on international co-operation between competition authorities. However, it does not discuss them in great detail. These options should be further explored by competition authorities at the OECD and in other international fora to identify ways to effectively address the implications of globalisation for competition. The OECD Competition Committee is already working on policy options for international co-operation in competition enforcement cases. This paper provides some analytical and empirical analysis that will support the Committee discussion and future work.
2. Historical background

2.1 International co-operation and the role of the OECD

The need to address the challenges that competition authorities face in cross-border competition cases is not new for the OECD Competition Committee and for the competition enforcement community overall. The Competition Committee has devoted significant time and resources to enhancing international co-operation between competition authorities since the establishment of its Working Party No. 3 (WP3) on Enforcement, in 1964. To date, international co-operation is the area in which the Committee has developed the greatest number of best practices and recommendations.

The challenges faced when investigating cross-border cases which require a co-ordinated approach by several enforcers have become more and more complex over the years. The number of cases with such characteristics has increased rapidly and the number of enforcers regularly involved in the review of cross-border cases has also grown. The OECD and its Competition Committee have contributed to a great extent to developing new approaches to address this evolving challenge (See Box 1.)

This body of work responded to an increased need to reduce the risk of inconsistent outcomes by ensuring an effective dialogue between enforcers. Over time, the OECD has developed innovative approaches to co-operation. For the first time, the OECD has expanded the international law concept of “comity” beyond the traditional boundaries developed under international public law (also called “traditional or negative comity”) to develop a new concept of “positive comity”, whereby competition authorities can request another jurisdiction to address anti-competitive conduct that might best be fixed with an enforcement action in the country that is the recipient of the request. (See Box 2.) Positive comity provisions are now included in many bilateral co-operation agreements between countries.

Comity is a defining principle of international co-operation. It is the international legal principle whereby a country agrees to take other countries’ important interests into account while conducting its law enforcement activities, in return for their commitment to do the same. For over 100 years, public international law has acknowledged comity as a means for tempering the effects of the unilateral assertion of extraterritorial jurisdiction. Comity is therefore a horizontal, sovereign state to sovereign state concept. It is not the abdication of jurisdiction; instead, it is the exercise of jurisdiction with an accompanying understanding of the impact that the exercise of jurisdiction may have on the law enforcement activities of other countries. Jurisdictions apply international comity principles in many substantive areas of law (e.g., tax, insolvency, anti-bribery, environmental regulation) to ensure that complex cross-border enforcement problems are resolved in a manner that balances the policy and enforcement concerns of the states involved.
Box 1. OECD Recommendation and Best Practices on International Co-operation

Since 1967, the OECD approved a series of Council Recommendations which have been elaborated and progressively refined by the Committee, dealing directly or indirectly with international co-operation between competition authorities on enforcement cases. International co-operation is also addressed by the 2005 Committee Best Practices on the exchange of information between competition authorities in hard core cartel cases.

The first Recommendation on international co-operation in enforcement cases dates back to 1967. Four other versions of the Recommendation were adopted by the OECD Council over the years. The 1995 Co-operation Recommendation is the one in force today. It recognises that the powers of competition authorities to co-operate are limited, and it encourages Member countries to (a) notify other countries of an investigation involving their interests, (b) co-ordinate their respective actions when more than one jurisdiction is looking at the same case, and (c) supply one another with any information on anti-competitive practices. The Recommendation acknowledges that competition authorities should operate within the limit of existing national laws and that the Recommendation should not be construed as affecting national sovereignty and extra-territorial application of national competition laws.

The 1998 Recommendation on Hard Core Cartels marked the first time the OECD defined and condemned a particular kind of anti-competitive conduct. The Recommendation was expected to contribute to the efficient operation of international markets by promoting, inter alia, co-operation among Member and non-Member countries. The first part of the 1998 Cartel Recommendation provides that Member countries should ensure their competition laws effectively halt and deter hard core cartels. The second part of the Recommendation stresses Member countries’ common interest in preventing hard core cartels and sets forth principles concerning the “when” and the “how” of co-operating with respect to hard core cartels.

The 2005 Recommendation on Merger Review evolved from a desire to consolidate and reflect the wide-ranging work on merger control, and also to take into account important work by other international bodies in this area. The goal was to create a set of internationally recognised best practices for the merger review process, including co-operation among competition authorities in merger review. The Recommendation deals specifically with Co-ordination and Co-operation on cross-border merger cases and invites Member countries to co-operate and to co-ordinate their reviews of transnational mergers in order to avoid inconsistencies. Member countries are encouraged to consider actions, including national legislation as well as bilateral and multilateral agreements or other instruments, by which they can eliminate or reduce impediments to co-operation and co-ordination.

When authorities exchange confidential information in cartel investigations, the 2005 Best Practices for the Formal Exchange of Information in Cartel Investigations aim to identify safeguards that Member countries should consider applying. The Best Practices invite Member countries to support information exchanges in cartel investigations. When initiating an exchange of information, jurisdictions should act with the necessary flexibility in light of the circumstances of each case and should apply appropriate safeguards to protect the information exchanged in the receiving jurisdiction and protect the due process rights of the parties. The Best Practices specifically mention the legal profession privilege and the privilege against self-incrimination.
Box 2. Negative and Positive Comity

International co-operation in the competition field employs two types of comity: negative comity and positive comity:

Negative or traditional comity involves a country’s consideration of how to prevent its laws and law enforcement actions from harming another country’s important interests. The OECD’s successive Recommendations on co-operation in competition matters (the most recent in 1995) recommended that in seeking to implement negative or traditional comity a country should: (1) notify other countries when its enforcement proceedings may affect their important interests, and (2) give full and sympathetic consideration to ways of fulfilling its enforcement needs without harming those interests.

Positive comity involves a request by one country that another country undertakes enforcement activities in order to remedy an allegedly anti-competitive conduct that is substantially and adversely affecting the interests of the referring country. The term “positive comity” appears to have been coined during the negotiation of the 1991 Co-operation Agreement Between the Government of the United States of America and the Commission of the European Communities Regarding the Application of Their Competition Laws. However, the underlying concept was decades old. Positive comity provisions have been included in the OECD Recommendations on co-operation since 1973, although the term “positive comity” has not been used specifically. The 1995 OECD Recommendation sets out that a country should: (1) give full and sympathetic consideration to another country’s request that it open or expand a law enforcement proceeding to remedy conduct in its territory that is substantially and adversely affecting another country’s interests, and (2) take whatever remedial action it deems appropriate on a voluntary basis in considering its legitimate interests.

But positive comity is not the only example of a “new approach” developed by the Committee over the years. OECD Recommendations also identify “investigative assistance” as a tool to strengthen enforcement in one jurisdiction with the help of enforcers in other jurisdictions. There is a difference between positive comity and investigatory assistance. Positive comity involves investigating anti-competitive practices and remediying them if possible in order to assist the requesting country. The proceedings are therefore conducted by the country that receives the request. In contrast, investigatory assistance, such as information sharing or gathering information on behalf of a foreign country, involves a request for assistance in the requesting country’s enforcement action. The concepts are similar, but raise different legal and political issues. An effective and efficient investigation process may often go beyond selecting one or the other and require a wider range of co-operative activities, with both countries engaging in investigative activities at some point (or points). The OECD was the first organisation to develop principles in this area, which is clearly distinguished in the OECD’s 1995 Recommendation.

In light of the increasing pressure on authorities to engage in effective co-operation, the on-going Committee project on international co-operation gives the Committee the opportunity to follow its tradition and identify new approaches that can help authorities face the challenges posed by cross-border enforcement of competition laws. Among other things, the Committee is discussing whether there is sufficient scope to develop new principles and tools to assist authorities in their efforts to investigate cross-border anti-competitive practices or national anti-competitive practices for which the investigation requires access to information located in a foreign jurisdiction.
2.2. Co-operation: an on-going challenge for the antitrust community

The OECD’s Competition Committee has played an important role in shaping the framework for international co-operation between competition law enforcement authorities. As the 1995 Recommendation on International Co-operation recognises, the main driver for closer co-operation between enforcers is that “the continued growth in internationalisation of business activities correspondingly increases the likelihood that anti-competitive practices in one country or co-ordinated behaviour of firms located in different countries may adversely affect the interests of Member countries and also increases the number of transnational mergers that are subject to the merger control laws of more than one Member country”.

The expansion in the number of competition regimes in recent years did not necessarily translate immediately into more co-operation between authorities. Historically, only a limited number of authorities have engaged in international co-operation, although this number has increased over time. Until the 1990s, the need for co-operation was relatively limited, as only a handful of authorities around the world actually did enforce competition laws in a cross-border context. Moreover, the bilateral relationship between Brussels and Washington covered most (if not all) of the need for co-operation in those days. Today, according to the OECD/ICN Survey on International Enforcement Co-operation, thirteen competition authorities engaged in regular international co-operation; most of them are authorities from OECD member countries. Twelve more authorities have engaged in international enforcement co-operation more sporadically. See Figure 1 for a summary of figures on co-operation from 2007 to 2012.

Figure 1. Number of cases/investigations in which authorities had co-operated (2007-12)

![Graph showing number of cases/investigations in which authorities had co-operated (2007-12)](image)

The OECD/ICN Survey on International Enforcement Co-operation indicated that authorities from different jurisdictions co-operated in approximately 150 competition cases between 2007 and 2012. Cross-border merger cases were the most frequent subject of co-operation followed by cartel investigations and abuse of dominance cases (Table 1).

### Table 1. Experience with International Co-operation in Enforcement, by Enforcement Area (2007-2012)

<table>
<thead>
<tr>
<th>Number of authorities with any co-operation experience</th>
<th>2011</th>
<th>2010</th>
<th>2009</th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
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<td>116</td>
<td>101</td>
<td>106</td>
<td>96</td>
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<tr>
<td>Abuse of Dominance</td>
<td>13</td>
<td>29</td>
<td>26</td>
<td>22</td>
<td>22</td>
</tr>
</tbody>
</table>


The OECD/ICN Survey confirmed an increase in the use of international co-operation over the five-year period, with an estimated increase of approximately 15% in the number of cartel cases requiring some form of international co-operation, 35% in merger review cases and 30% in unilateral conduct cases. As will be discussed more extensively below, the number of opportunities for co-operation has probably increased much more than the actual incidence of co-operation. But as younger authorities in large/major economies become more active enforcers of competition law, the number of authorities engaged in enforcement related to cross-border cases is bound to rise significantly. While this is an overall achievement for competition internationally, it does pose challenges to an effective enforcement of competition rules against cross-border practices.

### 2.3 Main developments in international competition co-operation over the last decades

Competition policy and enforcement have been on the international agenda for many decades. In the 1940s, the “Havana Charter” and the creation of the ITO (International Trade Organisation) as a specialised agency of the United Nations (UN) referred to competition as a key component to eliminate trade barriers and to improve trade liberalisation. Similarly, the General Agreement on Tariffs and Trade (GATT) with its market-oriented nature and provisions seeking to eliminate artificial barriers and discriminatory practices seemed to pave the way for a code of international competition applicable to inter-State trade. However, no common standard or rule on competition developed at international level. At regional level, the 1957 European Treaty put competition at the core of the European construction and of the common market by prohibiting anti-competitive agreements and abuses of a dominant position through a series of provisions in the Treaty itself.

In the 1970s an active discussion took place in the UN on the need to discipline restrictive business practices of multinational enterprises. This resulted in a set of principles adopted by the UN in 1980: the Set of Multilaterally Agreed Equitable Principles and Rules for the Control of Restrictive Business Practices. Renewed attention to competition policy emerged in the 1980s due to perceptions that restrictive distribution practices and conglomerates could impede market access. The trade dispute between
Kodak and Fuji is a noteworthy example. The Uruguay Round (1986-1994) of GATT resulted in an internationally agreed-upon set of rules and codes of conduct that, although not directly targeting competition, have indirectly enhanced competitive outcomes because of their market oriented character. In 1997, a Working Group was established in the WTO to investigate the relationship between trade and competition policies. The 2001, the WTO ministerial meeting in Doha agreed that negotiations on this subject were to be launched at the 5th WTO ministerial in 2003 on the basis of modalities to be agreed by consensus. At the 2003 Cancun meeting, no such consensus emerged, reflecting continued differences in views on the merits of introducing binding competition law disciplines into the WTO.

### Box 3. Kodak and Fuji Film Distribution Dispute

During the post-1945 period, Fuji was able to solidify its position in the Japanese film market, arguably assisted by Japan’s tariffs on imports of photographic film and paper. When Japan began to reduce these tariffs until they were eventually eliminated in 1994, Kodak undertook numerous promotional efforts in Japan. Despite these efforts, Kodak’s share of the Japanese market remained virtually unchanged. Kodak blamed its lack of success in Japan on Fuji, which it claimed was using its dominant position in the Japanese market to prevent distributors from dealing with foreign competitors. Moreover, Kodak charged that the Japanese government itself had both tolerated and actively encouraged Fuji’s anti-competitive practices. A trade claim was filed by the US government against the Japanese government over alleged restrictions of market access to non-Japanese film makers. The trade dispute brought by the US under the WTO dispute resolution system was the first example of a new international legal approach for resolving international competition law disputes. The WTO Panel Report provides an overview of the claims and counterclaims made during the procedure; the Panel found that the US had not established that the Japanese government policies had significantly contributed to Kodak’s difficulties in Japan.

Some of the well-known international disputes in competition enforcement – such as the Boeing/McDonnell Douglas and the GE/Honeywell cases – led to active efforts to improve co-operation among competition enforcers. Authorities sought to ensure convergence between substantive competition standards applied by different jurisdictions and to establish closer co-operation. This led to significant substantive convergence in the area of cartels (started by the OECD Hard Core Cartel Recommendation in 1998) and in the area of mergers where today most jurisdictions apply the same economic standard of review despite differences in the wording of the law. Today, most competition authorities around the world speak the same economic and legal competition language, and enforce competition laws using comparable tools and principles.

Authorities have also sought ways to co-operate more effectively. In the United States, for example, in 1997 the then US Attorney General and Assistant Attorney General created the International Competition Policy Advisory Committee (“ICPAC”) to address the following topics (i) multi-jurisdictional merger review; (ii) the interface of trade and competition issues; and (iii) the future directions in enforcement co-operation between US antitrust authorities and their counterparts around the world, particularly in their anti-cartel prosecution efforts. The ICPAC produced a Final Report on Competition Policy in 2000 with important recommendations. These included:

- Enhancing co-operation on merger review by establishing a transparent legal framework for co-operation that contains appropriate safeguards to protect the privacy and fairness interests of private parties;
• Rationalising the existing systems for merger notification and review;

• Developing work-sharing arrangements with the objective to reduce duplication of enforcement actions, while preserving the right of each jurisdiction to take its own measures, as necessary;

• Making more use of positive comity provisions and considering further enhancing positive comity in a multilateral context.

This revived interest in international co-operation led to two main developments.

• First, the creation of the International Competition Network (ICN), which offered and continues to offer a platform for authorities to exchange experiences on enforcement issues.\(^{15}\) As its mandate states, the ICN advocates the adoption of superior standards and procedures in competition policy around the world, formulates proposals for procedural and substantive convergence, and seeks to facilitate effective international co-operation to the benefit of member authorities, consumers and economies worldwide. Although the ICN is not a platform for enforcement cooperation\(^ {16}\) it has helped to reduce differences between jurisdictions in the enforcement of their national law and has fostered informal co-operation by establishing contacts between case-handlers and fostering trust among authorities and officials.

• Second, some governments and authorities engaged in frequent co-operation have negotiated bilateral co-operation agreements with their main trading partners. Such agreements incorporate both negative and positive comity principles (along the lines of the OECD 1995 Recommendation) and demonstrate the commitment of the signatories to strengthening co-operation in the enforcement of competition law at the international level. The initial agreements entered into by the EU, Canada and the US were the forerunners of a growing network of bilateral agreements with and between younger competition jurisdictions. These “first generation” agreements have recently begun to give way to the negotiation of “second generation” agreements which provide for more extensive co-operation between the signatories, including the possibility to exchange confidential case information between enforcers. Similarly, at national level, some jurisdictions (e.g., Australia, Canada, Germany and the UK) have adopted national laws providing statutory “gateways” for voluntary disclosure to foreign law enforcement authorities of information gathered in the course of their own investigations. This can permit the sharing of information that is relevant to criminal or civil investigations.

2.4 Main features of international co-operation today

Today co-operation is multi-faceted. Multilateral organisations such as the OECD, the ICN, UNCTAD and other regional organisations (such as the European Competition Network, the Andean Community, APEC, ASEAN, COMESA, CARICOM, SADC and WAEMU among others) provide opportunities for authorities to continue the process of convergence of substantive competition standards. While significant progress has been made since 2000, there is still room for more convergence in areas such as unilateral conduct, or in the specific enforcement tools, such as leniency programmes and merger remedies.

Multilateral enforcement co-operation platforms can be found especially at regional level. The European Union and the co-operation network between competition authorities of EU Member states (the European Competition Network or ECN) are probably the most advanced example of this form of co-operation. Other examples of regional co-operation
networks can be found among the Scandinavian countries, the CIS countries, and in Latin America, Africa and Asia.

Outside these regional networks, enforcement co-operation is generally based on bilateral co-operation agreements and Memoranda of Understanding (MOUs) between the authorities concerned. More rarely, authorities resort to the use of co-operation instruments that are not specific to competition, such as Mutual Legal Assistance Treaties (MLATs) or co-operation provisions in other international treaties (e.g. extradition treaties). Free trade Agreements (FTAs) also include provisions which allow co-operation among competition enforcers. However, these provisions tend to be less detailed than those in a dedicated bilateral agreement on competition matters. The existing network of bilateral relationships has proved effective in providing support to authorities’ needs for co-operation when only a few authorities are involved in the co-operation exercise and when these authorities are those who already have in place some form of co-operation arrangement among themselves. But even in the absence of formal co-operation arrangements, informal co-operation often occurs.

Informal co-operation has largely grown over time and agencies do co-operate in parallel cases even in the absence of a formal cooperation agreement. While there is no generally agreed distinction between formal and informal co-operation but there is a continuum of forms of co-operation, it is clear that most co-operation does not depend on the use of legislative instruments and treaties. Informal co-operation, however, faces important limits when co-operation would require activities which are restricted under national laws, such as the exchange of confidential information. This can only take place if a formal (national or international) instrument expressly allows for it.

As the number of authorities involved in cross-border enforcement grows and the number of cross-border cases increases, the current network of bilateral arrangements may prove insufficient or inefficient. Bilateral arrangements cover only a small set of authorities (for example the US has only nine competition co-operation agreements and the EU has only four). Increasingly, cases involve authorities that do not have a co-operation agreement in place with other enforcers involved in the same investigation. Even when there are bilateral agreements among all or some of the authorities involved, these co-operation agreements can be different in scope and provide for different co-operation tools. For example, there will be situations in which some authorities will be able to exchange confidential case information with some of the other authorities involved in the case, but not with all of them. Some authorities might be able to do so thanks to national co-operation provisions; others might have to rely on more formal tools from non-competition treaties; and finally, others might only be able to engage in informal co-operation as they will not have any co-operation instrument in place. Information sharing can be particularly sensitive in contexts in which criminal prosecution may be applied or where information would not receive the same legal protections of confidentiality in a potential recipient jurisdiction as in the originating jurisdiction.

The experience of regional co-operation networks shows that close commercial ties and high rates of cross-border cases has led to the development of multilateral co-operation platforms. The most extensive co-operation involves the European Union and the ECN, with the European Commission and its economies applying competition law in a relatively homogeneous way. More generally, while authorities in a regional network may continue to enforce national laws in cross-border investigations, they can agree on a common set of co-operation tools and mechanisms. These can enable effective co-
operation regardless of the authorities and type of cases that require international co-
operation.

The purpose of international enforcement co-operation is two-fold. On the one hand,
co-operation offers authorities the opportunity to have more effective investigations and
to generate efficiencies, for example through the use of each other’s material; and this in
itself is beneficial for businesses as well. On the other hand, co-operation aims at
minimising risks of divergent outcomes by facilitating the dialogue among the enforcers
involved in the review of the same case. Depending on the legal basis available for co-
operation, authorities are normally able to contact each other about ongoing cases, and
discuss investigative plans, theories of harm, and intended outcomes for their separate
investigations. In a few cases, they will also be able to go further and share documents,
pieces of evidence, and confidential information. But in the end, authorities must each
make their own decisions, even if those decisions are based on the same facts and
conduct. The overall enforcement co-operation system as it exists today (again with some
notable exceptions at regional level) makes no systematic attempt to rationalise
enforcement and reduce the number of parallel investigations to make better use of
investigative resources in national authorities.20

International co-operation involves resource (opportunity) costs. This can be seen at
two levels. First, providing co-operation in a specific matter can be time and resource
intensive. Second, at a more general level, co-operation is more likely where respective
authorities have a relationship of trust and a good understanding of each other’s
legislation. Relationships of trust are important for both formal and informal co-
operation. Achieving this trust is time consuming and resource intensive, particularly for
smaller agencies. However, incurring these costs also brings benefits, both in terms of the
specific enforcement activity and in building an ongoing relationship of trust with other
agencies in which enforcers can assist each other over time and across multiple matters.

As the remainder of this paper will discuss, the combination of an increasingly
globalised economy and the proliferation of competition regimes around the world
increases the likelihood of cross-border investigations, leading to more authorities
devoting resources to the same investigations, as well as to an increased potential for
inconsistent or conflicting competition law enforcement.
3. The demand drivers for competition law enforcement co-operation

The need for competition law enforcement co-operation is driven by the potential benefits of co-operation relative to the potential costs. These benefits and costs flow from structural factors that will be analysed sequentially.

- The first factor is the increasingly interconnected nature of economic activity, which gives rise to more cases that warrant cross-border co-operation;
- The second is the larger number of jurisdictions enforcing competition law, and the increasing activity that can be expected from young/new competition authorities.

3.1 Increasing international connectedness and its impact on competition enforcement

In the years to come, “policymakers will have to deal with two intertwined developments: rising global interdependence and an increasingly multipolar world as emerging economies will form a growing share of the world economy. The former will have several implications. First, the effects of economic shocks will in many cases be shared with trading partners to a larger extent, reducing volatility and risks for individual countries. In the same vein, international spillover effects from policies are likely to increase too, in some cases pointing to benefits from further international policy coordination. The latter will make such coordination more complex as the number of key stakeholders – often with different perspectives and policy priorities – will increase.”

The following sections offer some evidence on the increasingly stronger economic links existing between countries and regions.

3.1.1 Economic interdependence

The extent of economic interconnectedness between economies has increased in recent decades and is expected to continue increasing in the foreseeable future. Since 1990, a growing number of M&A transactions and agreements between competitors have had a cross-border (and sometimes global) dimension as well. This illustrates how the increasing international content of value chains has been accompanied by an increase in connected business activities, such as M&As, and a coincident increase in the need for cross-border competition law enforcement. This section of the paper applies various measures of economic interconnectedness to illustrate the fundamental economic forces that drive the need for co-operation among competition authorities.

3.1.1.1 Trade

Trade and cross-border investment have increased substantially since the early 1990s. For example, the value of trade among the 50 countries analysed here rose from about USD 90 billion per year back in 1990 to USD 270 billion in 2011 (all values deflated to USD 2005). While the growth rate of trade is expected to slow from about 6% to 3.5% in the 50 years through 2060, mainly because of the maturing of the Chinese economy, this would still result in world trade growing by about 540% in the 50 years from 2010 to 2060, reaching USD 1,450 billion in value by 2060.
The patterns of trade are likely to change substantially. In particular, while more than 50% of world trade currently occurs between OECD Member countries and more than 75% includes OECD countries as importer or exporter, those shares are expected to change so that, by 2060 more than a third of world trade would not include any current OECD member country. Many smaller Asian countries and African countries, in particular, are predicted to have robust trade increases, implying a rising share of world trade.

Trading partners for Europe, the United States, Japan, the Republic of Korea and Australia have changed substantially between 1990 and 2010, with China in particular taking a much more prominent role in international trade.

**Figure 2. Average trade value for a country in grouping**

![Graph showing average trade value for a country in grouping from 1990 to 2011.](image)

*Source: UN Commodity Trade Statistics database, OECD calculations*

Note that the countries in the BRIICS grouping include Brazil, Russia, India, Indonesia, China and South Africa.

Whether measured by value of trade, or as trade relative to GDP (Figure 2 and 3, respectively), between 1990 and 2011, there has been a large increase in trade, though larger in some periods than others. The increase of trade as a ratio of GDP is lower than the percent increase for trade in USD because GDP has been growing at the same time as trade, though at a lower rate.
While the value of trade in goods has expanded substantially since the early 1990s, foreign direct investment (FDI) has also expanded substantially since the early 1990s. OECD statistics show that, worldwide, the inflow of FDI has increased by more than four times between 1990 and 2012 (Figure 4). The levels of increase vary between OECD, G20 and the European Union, but the broad findings are similar, with a high variability between 2000 and 2012, though nonetheless much higher levels than in 1990.

Source: OECD

Note: OECD includes 34 countries and excludes Special Purpose Entities (SPEs) for Austria, Hungary, Luxembourg and Netherlands. EU is EU15 until end 2003, EU25 in 2004, 2006, EU27 as from 2007. Source for 'Total World': World totals are based on available FDI data at the time of update as reported to OECD and IMF.
3.1.1.3 Cross-border M&A

Trade statistics are closely reflected in experience with cross-border deals. For the purpose of this exercise, we considered cross-border acquisitions characterised by the acquisition of 50% or more shares acquisitions of a company with a headquarters in one country by a company with its headquarters address in another country as a proxy for cross-border notifiable mergers in the antitrust sense. Based on an OECD analysis of data on 63,824 deals and investment stakes in Dealogic’s Global M&A Database from 1995 to 2011, the number of cross-border deals has increased substantially, from an average of 3,513 per year over the five years from 1995-1999 to 7,523 per year over the five years from 2007-2011 (see Figure 5). Not all of these cross-border deals would be subject to a merger multi-filing requirement (which normally depends on the turnover of the merging parties and their geographic allocation) or would raise concerns resulting in one or more competition law investigations, but the extent, and growth, of cross-border M&As may nonetheless be taken as an indicator of the set of cases with the potential to raise legitimate international competition law concerns that could lead to investigations in multiple jurisdictions.

The geographic spread of merger activity has also changed substantially since 1995, with a much greater emphasis on acquirers or targets in Asia and a substantial increase also in cross-border deals involving Latin America and Africa (Figures 6 and 7). Patterns of trade and GDP growth suggest that these continents will become even more economically important in the future. The change in China’s trade and GDP was coincident with an increase in the involvement of Chinese firms in M&A activity, both as targets and acquirers. Assuming the number of mergers and acquisitions rises in proportion to GDP share, Asia, Africa and Latin America should ultimately constitute a much higher percentage of cross-border M&A deals than is currently the case. Figures 6 and 7 show how the continents of acquiring and target companies have changed between 1995 and 2011 from a focus on Europe and the Americas towards other regions, notably Asia. Asian target companies have grown from about 15% of all targets to about 29% during that period, with much of this activity involving China. These trends suggest that the focus of mergers is shifting from the traditional jurisdictions of cross-border competition law co-operation.

Figure 5. Number of cross-border M&A deals: 1995 - 2011

Source: Dealogic Global M&A Database, OECD calculations
Figure 6. M&A by continent of the acquirer: 1995 and 2011

In 2011, Acquirer

Source: Dealogic Global M&A database, OECD calculations

Figure 7. M&A by continent of the target: 1995 and 2011

In 2011, Target

Source: Dealogic Global M&A database, OECD calculations
A rising trend is also seen in the extent of cross-border deals involving the top 50 firms of the Fortune Global 500. The number of cross-border deals involving those firms rose from 65 in 1995 to 153 in 2011, albeit not continuously, as shown in Figure 8.

**Figure 8. Cross-border M&A deals by top 50 Global Fortune 500 companies: 1995-2011**

Source: Dealogic Global M&A Database, OECD calculations

### 3.2 Increase in the number of jurisdictions enforcing competition law

The spread of competition law enforcement around the world has been remarkable. At the end of the 1970s only nine jurisdictions had a competition law, and only six of them had a competition authority in place. By 1990, there were 23 jurisdictions with a competition law and 16 with a competition authority. The number of jurisdictions with competition authorities increased more than 500% between 1990 and 2013. As of October 2013, about 127 jurisdictions had a competition law, of which 120 had a functioning competition authority. Figure 9 illustrates this.

This rate of expansion in national competition law regimes will surely slow down. Many of the states that do not have competition laws are lower income countries that are less likely to adopt such laws soon. While not all countries are equally active in enforcing the law, particularly against companies headquartered outside their borders, the reach and self-confidence of new authorities could increase substantially in the future.

The rapid expansion to date is largely due to the recognition that competition policy promotes economic growth. There is a wide-spread recognition that a strong competition policy contributes substantially to successful economic development, to the promotion of consumer welfare, and to a vibrant, market economy.
3.2.1 Increase in activity of new competition authorities

Many of the authorities that have been established since 2000 are likely to become considerably more active in the future than they are currently. For example, in India the competition law was passed in 2002 and was assented to in 2003, but the provisions on anti-competitive agreements and abuse came into effect in May 2009 (and there were amendments to the Act in 2007) and the merger control provisions were not put into effect until 2011. If one looks at the track record on merger decisions of the Competition Commission of India, in 2011 it issued 12 decisions, in 2012 80 decisions and in 2013 46 decisions were released (see Table 2 below). From 2011 to 2013, 89 of the merger decisions involved international companies.

Table 2. Merger decisions by the Competition Commission of India

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of cases</td>
<td>46</td>
<td>80</td>
<td>12</td>
<td>138</td>
</tr>
<tr>
<td>Number of cases in which an international company was involved</td>
<td>38</td>
<td>40</td>
<td>11</td>
<td>89</td>
</tr>
<tr>
<td>Rate of cases with international company involved</td>
<td>82.61%</td>
<td>50.00%</td>
<td>91.67%</td>
<td>64.49%</td>
</tr>
<tr>
<td>Total number of companies</td>
<td>130</td>
<td>230</td>
<td>34</td>
<td>394</td>
</tr>
<tr>
<td>Total number of international related companies</td>
<td>67</td>
<td>88</td>
<td>23</td>
<td>178</td>
</tr>
<tr>
<td>Rate of international companies</td>
<td>51.54%</td>
<td>38.26%</td>
<td>67.65%</td>
<td>45.18%</td>
</tr>
</tbody>
</table>

Source: OECD, based on publicly available information.
Box 4. A Co-operation Complexity Index

The complexity of bilateral co-operation increases with the number of authorities potentially involved in an enforcement case and the potential number of interfaces of co-operation on that case. While extreme scenarios where a hundred or more authorities would be involved reviewing the same transaction or allegedly anti-competitive conduct are unrealistic, there are situations already today where 15 authorities from different jurisdictions are notified the same merger for approval under their national law, and even more regularly situations with 5 or more authorities active in a merger.

For example, data from one large multinational corporation that has an active deal flow on its M&A deals originating in the period 1990-2012 shows that in 8 instances (all of them after the year 2000) filings were made to 10 or more authorities. Between 1991 and 2000, that company had 5 M&A deals with 5 or more filings, while between 2001 and 2010, it had [40-50] filings with more than 5 authorities, an increase of about 900%. To the extent that M&A deals with multiple filings require coordination, the number of deals meriting coordination has increased substantially.

For this corporation, Table 3 shows that the percentage of M&A deals for its filings in three or more jurisdictions (outside the US) has risen from 0% in 1991-1995 to 34% in 2006-2010. The economic importance of the 34% figure may be understated, as the value of M&A deals is generally higher when there are more filings.

Table 3. Percentage of M&A deals in different ranges of competition law filings, by time period, for a multinational corporation

<table>
<thead>
<tr>
<th>Time Period</th>
<th>2 or fewer filings</th>
<th>3 to 5 filings</th>
<th>6 or more filings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991-1995</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>1996-2000</td>
<td>81%</td>
<td>15%</td>
<td>4%</td>
</tr>
<tr>
<td>2001-2005</td>
<td>63%</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>2006-2010</td>
<td>66%</td>
<td>21%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Source: Data supplied to OECD on a confidential basis by a multinational corporation.

It is reasonable to predict that M&A deals with multiple filings will be more and more common in the future. If 15 different authorities are reviewing the same transaction and if they need to co-operate bilaterally in their national reviews, the number of possible interactions would be more than a hundred.

Annex 1 explains how to calculate an index of the complexity of bilateral cooperation. The Co-operation Complexity Index for merger deals has increased by about 23 times from 1995 to 2011. (See Annex 1)

The index can also be calculated for cartel enforcement, as a function of the number of authorities involved and the number of investigations with an international element. For international cartel investigations, the Co-operation Complexity Index has increased by about 53 times between 1990-1994 and 2007-2011. (See Annex 1)

The speed and breadth of the proliferation of competition laws and competition enforcers around the globe is the single most important development in the competition area over the last 20 years. The OECD, as well as other international networks and organisation (such as the ICN, UNCTAD, APEC and ASEAN) have significantly contributed to such phenomenon. As this paper intends to emphasise the benefits of the wider acceptance of competition principles across jurisdictions have created new economic challenges for the international community of competition enforcers. The interaction of multiple authorities on the review of the same merger or anti-competitive conduct required the development of new tools and of a new collaborative culture among jurisdictions. As the challenge evolves in its dimension and complexity, enforcers face
the challenge of how to devise new frameworks for co-operation that allow them to increase the effectiveness of their enforcement actions and at the same time ensure consistency in how competition law is enforced by different countries.

Comity principles and co-operation can go a long way in mitigating differences between jurisdictions as they protect their consumers from the effects of anti-competitive conduct or anti-competitive mergers. Efforts have been made at international level to ensure that despite differences in statutory provisions, enforcers endorsed a shared view of what competition stands for and of the principles on which competition enforcement and policy rests. This commonality of values is underpinned by a common understanding of the law and economics of competition and that has significantly favoured the development of co-operative relationships between jurisdictions. Such relationships have sometimes been formalised in international legal instruments but more often have simply developed informally.

The proliferation of national competition laws however has not necessarily helped to address the challenge that is increasingly affecting competition authorities. Authorities apply national laws to anti-competitive behaviours which are increasingly cross-border. However, there are well-recognised limits – in some cases constitutional ones – to the authority of an agency to act outside its jurisdiction. It is important to note that these limits based on sovereignty are not irrational or necessarily undesirable, as the alternative would be unrestrained “extraterritoriality” with economies free to take enforcement actions untethered to effects in their own jurisdiction. It is to this challenge that countries are now called to find solutions. And it is for this reason that the topic of enhanced co-operation, comity and deference, and mutual recognition are currently on the agenda for future discussion in the Competition Committee.

3.3 The impact of increased interconnectedness on antitrust cross-border enforcement

The integration of domestic economies into an increasingly global economy has had an important impact on the nature of the enforcement activity of competition authorities. Cases and investigations reflect the increasingly cross-border activities of businesses and often require support from foreign enforcers. The following sections describe this trend through the analysis of the number of cross-border cartels prosecuted in recent year and a review of how the enforcement activity of two major competition authorities (i.e. the Directorate General for Competition of the European Commission, or DG COMP, and the Antitrust Division of the U.S. Department of Justice, or US DOJ) has evolved over time and has become increasingly cross-border.

3.3.1 International cartels have been an increasing focus of prosecutions

Cartels can be either domestic or cross-border. A cross-border cartel would involve illegal behaviour by companies in at least two jurisdictions.

The number of cross-border cartels revealed in an average year has increased substantially since the early 1990s. According to the Private International Cartel (PIC) database, about 3 cross-border cartels were revealed via competition authority decisions or prosecutions in an average year between 1990 and 1994. In recent years, from 2007 to 2011, an average of about 16 cross-border cartels has been revealed per year. Figure 10 shows the number of cartels revealed per year, between 1983 and 2011. The data suggest a 527% increase in cross-border cartel enforcement between 1990-1994 and 2007-2011.
Similarly, as Figure 11 shows, since 1992, there has been a substantial increase in cross-border cartel fines per year, according to the PIC database, though the levels clearly vary significantly from year to year. A large part of this increase may be due to a greater effort devoted to ensuring that fines for cartel violations compensate for their large potential illicit gains and consumer harm.

**Figure 11. Total fines from cross-border cartel investigation (US Million $)**

*Source: Private International Cartels dataset, OECD calculations*
In a number of high profile cartel investigations, dawn raids have been conducted simultaneously across multiple jurisdictions, including the United States, the European Union, the Republic of Korea, Australia, Canada and Japan. Such dawn raids have clearly required coordination. While these dawn raids appear at times to have involved truly global cartels, only a small percentage of the world’s competition authorities have been involved in raiding and prosecuting the firms.

### 3.3.2 EU cross-border enforcement has increased significantly

#### 3.3.2.1 Mergers

The increasing number of cross-border M&A activity reported above is confirmed by the increase in EU merger filings for deals with one company with headquarters in the EU and another headquarters outside the EU. The number of filings has increased from 67 in 1991 to 309 in 2011, an almost five-fold increase, as shown in Figure 12. EU merger filings are an indicator of the number of international deals that would have produced overlaps of interest to a competition authority.\(^{35}\)

**Figure 12. EU cross-border merger filings between 1991 and 2012**

![Graph showing EU cross-border merger filings between 1991 and 2012](source: EU DG Competition, OECD calculations)
The comparison between the number of intra-EU mergers (i.e. mergers between parties located in one or more of the EU member states) and the number of extra-EU mergers (i.e. mergers where at least one merging party was located outside the EU) shows how in recent years extra-EU mergers have increased significantly (Figure 12). From 2005 to 2011 there have been almost twice as many which involved companies headquartered in two or more jurisdictions (European or non-European). If one looks at the foreign-to-foreign mergers subject to EU filing requirements, the number has doubled over the period of analysis. For instance, between 1990 and 2000, 158 foreign-to-foreign mergers were filed with the European Commission, while in the decade that followed that number increased to 340. The number of non-EU headquartered companies involved in EU merger filings has increased substantially, from below 50 during the early 1990s to more than 200 per year since 2005 (Figure 13).

Figure 13. Number of non-EU companies with EU merger filing, by year

Source: EU DG Competition, OECD calculations

3.3.2.1 Cartels

The number of DG COMP cartel investigations has also risen sharply in the past ten years, indicating that cartel enforcement has become one of their top enforcement priorities. Using public information from the decisions published by DG COMP on its website, we show that the number of cartel cases involving one or more non-EU companies has also increased significantly, from 35% of the EU cartel decisions in the period 1990-2000 to 58% since 2001.
Figure 14. The geographical distribution of EC cartel cases since 1990

Source: EU DG Competition, OECD calculations

Figure 15 shows that there were very few cartel cases involving a non-EU company up until 2000 (nine cases). Most cartels involved exclusively EU companies (eighteen cases). The situation evolved significantly in the following decade (2001-2010), in which the number of cases involving non-EU companies rose to thirty six. From 2011 to July 2013, seven cartel cases out of the 10 decided by DG COMP involved a non-EU company. Figure 16 shows that there were fewer than 15 companies involved in cartel cases decided by DG COMP between 1990 and 1995, while 92 non-EU companies were involved in cartel cases decided by DG COMP between 2008 and 2012.

Figure 15. The distribution of EC Cartel enforcement by continent and year

Source: EU DG Competition, OECD calculations
Figure 16. Number of non-EU companies in EC cartel enforcement cases, by year

Source: EU DG Competition, OECD calculations

Analysis of the cartel fines imposed by the European Commission over the same period of time confirms the increasing inclusion in EU cartel cases of non-EU companies. Figure 17 shows how the fining policy of the European Commission has changed since 2001 with the total fines imposed steadily increasing over time. Since 1990, 67% of the total cartel fines imposed by the European Commission related to cartel cases in which there was at least one company involved from a non-EU member country.

Figure 17. Total fines of EC cartel enforcement per year

Source: EU DG Competition, OECD calculations
3.3.3 US Department of Justice cross-border cartel enforcement

The cartel enforcement activity of the US DOJ can also serve as an indication of the increasingly cross-border nature of cartels.

Since the early 1990s, the US DOJ has recognised the harm that international cartels pose to American businesses and consumers and prosecuting these illegal behaviours has become a key priority for the Department. According to Scott Hammond (former Deputy Assistant Attorney General for Criminal Enforcement), the Antitrust Division typically has approximately 50 international cartel investigations open at a time. Since May 1999, more than 40 foreign defendants have served, or are serving, prison sentences in the United States for participating in an international cartel or for obstructing an investigation of an international cartel. Foreign nationals from France, Germany, Japan, the Republic of Korea, Norway, the Netherlands, Switzerland, Chinese Taipei and the United Kingdom are among those defendants. In the well-known vitamins case of 1999, for example, twelve individuals, including six European executives, were sentenced to serve time in US prisons for their role in the vitamin conspiracy.

The automotive parts investigations exemplify the need for the Antitrust Division to cooperate with foreign counterparts. The investigation included search warrants executed on the same day and conducted at the same time as searches by enforcers in other countries. During the ongoing investigation the Antitrust Division coordinated with the competition law authorities of Japan, Canada, the Republic of Korea, Mexico, Australia, and the European Commission.

Based on public data concerning US DOJ cases with an international dimension, the number of individual prosecutions of US and non-US companies involved in these cartel investigations has steadily increased over time (Figure 18). Up until the end of the 1990s, the US DOJ prosecuted fewer than 9 companies on average per year, but the years that followed witnessed a steep increase in the average number of prosecutions per year, with a peak of 21 prosecutions in 2010 followed by 18 in 2010.
Figure 18. DOJ cartel enforcement: number of companies charged in cases with an international dimension

Source: Public US DOJ data, OECD calculations.

Figure 19 shows the increase in the number of foreign companies and individuals involved in prosecutions which were flagged for their international aspect. Between 2008 and 2011 there have been more than 10 non-US-companies involved in US cartel cases with an international dimension in each year.

Figure 19. Number of non-US companies involved in US cartel cases flagged for their international aspect

Source: Public US DOJ data, OECD calculations
Criminal fines also indicate how US DOJ cartel enforcement has an increasingly international reach. Today more than 90% of the total amount of significant criminal fines imposed each year involves cartels with an international dimension. Figure 20 shows that since 1996, fines from international cartels have accounted for more than 90% of all fines exceeding USD 10 million.  

**Figure 20. US cartel fines by origin**

![Graph showing US cartel fines by origin](image)

*Source: Public US DOJ data, OECD calculations*
4. Costs of enforcement disagreements: mergers and cartels

Both merger reviews and cartel investigations are susceptible to various types of incompatible outcomes or lack of co-operation that can have a chilling effect on legitimate business activity or a freeing effect on harmful business activity. Some of the costs related to merger disagreements and cross-border cartel enforcement are discussed in turn below.

In this paper we do not address specifically the cost of possible lack of co-operation in investigations of abuse of dominance/unilateral conduct. This is because there have been fewer investigations of unilateral conduct by multiple authorities to allow us to draw some conclusions, although the number has increased in recent years (especially in high technology markets) even more quickly than investigations involving mergers and cartels. That being said, the need to consider new approaches to enhanced co-operation applies equally to these investigations. In this respect, cross-jurisdictional disagreement in abuse of dominance investigations can create particularly complex situations for international businesses.

4.1 Cross-border mergers

Cross-border mergers create scope for disagreement between competition authorities and can give rise to substantial costs when such disagreements occur. Failure to prevent anti-competitive global mergers, for example, may create large companies that can operate with market power throughout the world. If they are effectively much larger than any potential entrant anywhere in the world and able to sustain their position through threats and unwritten business practices that penalise purchasers who deal with new entrants, there is a real possibility their market power may be sustained internationally and over time. In this sense, stopping an anti-competitive global merger may be more important than stopping an anti-competitive national merger, as there will be fewer options for remedying the situation later.

Consider a merger between two ‘global’ companies – whether headquartered in the same country or not – that sell into several jurisdictions, overlapping in at least two. Under the effects doctrine, such a merger could come under scrutiny in multiple jurisdictions. The authorities in the various jurisdictions concerned might consult one another to some degree (depending for example on the provisions of their laws, particularly as regards exchange of confidential information), both on the substantive question of whether there is likely to be a loss of competition and on remedies. However, even if they consult one another, competition authorities must take their decisions independently and with regard to the interests of their home jurisdiction, notwithstanding the availability of comity considerations in some cases.

In short, regulatory approval for an international merger will be decided through a multiplicity of independent national decisions. We now discuss some of the effects of these parallel processes.
4.1.1 The scope for disagreement on international mergers

Authorities in two or more different jurisdictions could reach different views on a global merger for at least three reasons:

1. The authorities in the two jurisdictions apply different rules of substantive analysis in assessing the merger;
2. Conditions of competition are materially different in the two jurisdictions; or
3. The two authorities have simply come to different outcomes, for example because the case is border-line or because of differences in the evidence collected and/or its interpretation.

4.1.1.1 Different substantive rules

Multinational companies are accustomed to dealing with different approaches in different countries, and understand that economic and legal situations will differ from one country to another. Competition specialists, however, have long discussed the problems caused by differing substantive rules. For example, in the GE-Honeywell case, different approaches taken for the assessment of a merger between suppliers of complementary products were seen as an important reason for the conflicting decisions taken by the US and EU authorities.

In a few cases, substantive differences might arise directly from the law. For example, differing evaluation criteria might be embodied in legislation – such as considering employment effects, or protection of small sellers against buyer power. Authority decisions may differ after taking such effects into account. Past and ongoing efforts to ensure soft law convergence remain critical for obtaining substantive or procedural convergence.

Many conflicting decisions under this category probably stem from less well-defined differences, simply reflecting different precedents and practices despite similar legal standards. For example, one authority might pay more attention to market shares than another, or be more concerned about vertical linkages. A recent study comparing US and EU approaches to merger control, for example, found that the EU is ‘tougher’ overall, but the US is ‘tougher’ on co-ordinated effects cases. Another recent study suggests that Chinese merger control “aims to promote pro-domestic objectives,” which may be a consequence of the underlying law, observing that, of the 21 prohibitions and non-conditional clearances through 27 August 2013, all have involved foreign companies. So far, the Chinese merger control regime has primarily applied behavioural remedies, avoiding potential international disagreements over global structural remedies. Conflicting decisions may also, at times, stem from different goals of competition law enforcement in different economies. For example, in the US the goal has been to ensure competition thrives and to prevent companies from achieving monopoly positions via anti-competitive means, in Europe the goal has been market integration and in China the goal has been economic development.

Convergence in substantive approaches is certainly important. However, even complete substantive convergence would not entirely eliminate inconsistent decisions, because there are at least two more reasons for competition authorities in different jurisdictions to make conflicting determinations on a merger affecting both jurisdictions.
4.1.1.2 Differing conditions of competition

Differing conditions of competition can clearly lead competition authorities to reach different conclusions when the merger’s effect are different in their respective jurisdictions. The effects of mergers will differ across jurisdictions, so the assessment of their effects can differ accordingly. The number of alternative suppliers may be different, for example. A merger that is a ‘five to four’ companies deal in a large jurisdiction could be a ‘two to one’ in one smaller jurisdiction, for example but have no effect whatsoever in another smaller jurisdiction with a different ‘two’ out of the ‘five’. Regulation can also result in products that are substitutes in one jurisdiction not being able to act as substitutes in another. Customer behaviour may differ, again resulting in authorities quite legitimately reaching different views either on market definition or on competitive effects of the merger.

While differing conditions of competition are a natural - and obviously legitimate - reason to arrive at different conclusions, the remedies adopted following different conclusions can still raise problems, for example if the remedies adopted to counter the merger’s adverse effects have harmful consequences for another jurisdiction where there are no adverse effects.

Another situation which might point to diverging interests between jurisdictions is that of mergers which affect different stages of the multinational supply chain in different jurisdictions. In some cases, this may mean that a jurisdiction cannot effectively remedy (or block) an anti-competitive merger without co-operation. This problem is particularly acute in jurisdictions which are just at the distribution end of a global supply chain and may not be able to effectively block a merger if it is cleared in the country where the major assets are located. A “going alone” strategy in relation to merger enforcement and remedies is likely to be highly ineffective in these circumstances. Hence the importance of effective co-operation to avoid anti-competitive effects of mergers going unscrutinised.

4.1.1.3 Different evaluation

Finally, competition authorities might simply disagree on the effects of a particular merger, even if the substantive test is the same and the conditions of competition are the same in both jurisdictions. Disagreement on effects can occur because the assessment of competitive effects is difficult. Reasonable people often differ, even on the likely effects of particular mergers. All practitioners will be familiar with ‘borderline’ cases in which the evidence seems fairly evenly balanced. In some jurisdictions there is empirical evidence of disagreement over effects, as decision-makers can record dissenting or minority opinions. For example, in the U.S. FTC with its long history of competition law enforcement, during 2011-2012, 17% of merger cases with a Commission vote featured a differing vote among commissioners on whether to file a complaint. If one looks at unilateral conduct cases decided by the U.S. FTC, in almost 55% of the cases there was at least one dissenting vote.

The frequency of international disagreements appears lower than the prevalence of disagreements between decision-makers within an authority: authorities seem to disagree with one another less often than they have internal disagreements. If true, this could reflect a desire to avoid international disagreements, particularly when a case seems finely-balanced.
4.1.2 The costs of international disagreements

Inconsistent decisions do occur in merger cases. Whether this inconsistency matters depends on whether there are any efficiencies from the merger and on whether efficient remedies can be implemented on a purely national basis. If national remedies are feasible, the effects of the merger can be remedied in jurisdiction A, while allowing the merger to proceed as is in jurisdiction B. For example, if the merging firms’ business activities are essentially national, while their parent companies are merging globally, a divestment that effectively blocks the merger in jurisdiction A might be possible, while allowing it in effect to proceed in jurisdiction B (and the rest of the world). In practice however effective national remedies are not always possible.

In many cases the most effective remedy available in jurisdiction A will have effects on jurisdiction B. This will be true of most structural remedies, particularly those affecting upstream production. A common model for global businesses is for production to be concentrated in a few locations, with sales across the world. This model does not easily allow a national structural solution; requiring a divestment of a local marketing company would not eliminate the producers’ changed incentives from their merger. Since the year 2000, the value of merger deals receiving treatment that is in some way inconsistent is probably around USD 100 billion.50

The inability to establish a national remedy creates an externality, with one agent – the competition authority in one jurisdiction – taking a decision that will affect the citizens of another jurisdiction, while not taking those citizens’ interests into account. Consequently, the decision will not maximise the welfare of both sets of citizens, taken jointly. If the merger results in general benefits (through efficiencies), but imposes harm in one jurisdiction that blocks it, then blocking the merger denies the benefits to other jurisdictions.

In practice, when the most effective remedy would impose such an externality, the authority in the blocking jurisdiction could instead choose a less effective ‘local’ remedy. It might do so out of concern that blocking a global merger because of purely local concerns would be disproportionate, or because any such prohibition (or significant upstream divestment) could not be enforced because the assets are not within the authority’s jurisdiction. This does not imply that behavioural remedies are necessarily less efficient, or that structural remedies can never be imposed at a purely national level. The point is that sometimes smaller jurisdictions will be constrained to choose them.52

How large does a jurisdiction have to be to impose a structural remedy on an international merger? The UK Competition Commission (CC) implemented behavioural remedies through undertakings on a merger between producers of medical equipment, both of whom manufactured products only outside the UK and then transported them to the UK. In its report, and in a subsequent retrospective analysis, the CC noted two practical constraints: one on its ability to enforce a structural remedy overseas and another reflecting a concern that the merged entity could simply withdraw from the UK. As the UK is the eighth largest economy in the world, it is clear that most authorities will face some practical constraints on their ability (and willingness) to block global mergers. Companies may take advantage of the inability of small jurisdictions to block a deal, especially in the absence of co-operation. By strategically filing merger notifications later in a small economy than in large economies (or in economies with a perceived tougher standard of review), a deal will already have passed review by larger jurisdictions before an affected smaller jurisdiction has gathered facts on the case and co-operated on the analysis with the larger jurisdiction.
Only a handful of very large jurisdictions can apply remedies or block global mergers for reasons relating solely to their own jurisdictions: the US, the EU, Japan and perhaps increasingly the major emerging economies – China, India and so on.\textsuperscript{55} This is a matter of bargaining power against companies that might threaten to withdraw from markets, rather than legal power. China was prepared and able to require a non-domestic divestment in Peru by Xstrata (a Swiss company) in 2013.\textsuperscript{56} In contrast, the UK decided not to prohibit the deal or to require divestments by Dräger (a German company) in 2004 because of concerns about the effectiveness and practicability of these remedies.\textsuperscript{57} Competition authorities in the smallest jurisdictions are well aware that they cannot effectively block international mergers.

What matters is the size of the market in the jurisdiction seeking to block the merger, compared to the total size of the markets for the merging firms. Mergers with a narrow geographic scope could be blocked by the local authorities. For example, in 2013 the UK Competition Commission put in place a prohibition on Eurotunnel operating ferry services at Dover which effectively blocked a merger between Eurotunnel and SeaFrance,\textsuperscript{58} which France’s Autorité de la Concurrence had previously approved with some behavioural commitments.\textsuperscript{59} As Eurotunnel by its physical nature must sell into the UK market, the UK Commission’s decision prevailed in practice.\textsuperscript{60}

\section*{4.1.3 Implications}

The need for a jurisdiction to have sufficient size before blocking a global merger avoids a situation in which 120 jurisdictions could each individually prevent the same merger. It may be better for global economic welfare that only the largest jurisdictions can block global mergers for domestic considerations. However, no economy – however large – constitutes much more than 20\%\textsuperscript{61} of world GDP, so any national decision with global consequences represents a large potential externality, affecting up to 80\% of the world economy. This should not be read as implying that smaller jurisdictions will have no say whatsoever in the review of global mergers. In most cases, the effects of a global transaction will be similar in larger and smaller jurisdictions, and a decision to block or approve a merger subject to condition in a large jurisdiction will consequently fix the problem also in the smaller jurisdiction. And in cases where this is not so, the smaller authority will generally be in a position to carve out local remedies or to accept behavioural remedies which will ensure that consumers in that jurisdiction will not be worse off.

Decisions to block or to clear are not symmetrical. While at times a remedy imposed to address one jurisdiction’s concerns will have impacts solely in that jurisdiction, at other times, the remedy will have cross-border or even global impact. A large economy can impose its decision to block a merger on the world; it cannot impose a decision to clear it. Consequently, the more jurisdictions there are that can block mergers (because they have a competition law and are large), the more mergers will be blocked. A truly global merger will be contingent on five, six or more jurisdictions independently reaching a decision not to challenge it. The unintended effect might be to chill merger activity, for two reasons:

\begin{itemize}
\item The strictest standard will prevail; and
\item Even if all apply the same standards, requiring multiple independent clearances makes overall clearance less likely.
\end{itemize}
4.1.3.1 Strictest standard will prevail

If competition authorities independently impose remedies with global implications, the most interventionist standard will be the one that prevails. In 2001, the US authorities cleared the GE/Honeywell merger subject to remedies while the EU required remedies that caused the deal to be abandoned. Many commentators suggest that the EU was applying a tougher standard to a merger between producers of complementary products than the US applied. The merger did not go ahead, so the EU’s standard prevailed in this case.

The same applies to globally-effective remedies that fall short of prohibition. For example, Glencore and Xstrata are Switzerland-based mining companies with production at sites in various countries and global sales. The Antitrust Division of the US DOJ took no action against the merger in 2012, while China’s MOFCOM in 2013 required divestment of the Las Bambas copper mine, now under development in Peru (in addition to some behavioural remedies). It is well possible that the conditions of competition differed materially between these jurisdictions. However, the merged entity’s market share of copper sales in China was less than 18% – below the level at which most competition authorities would consider intervening. Copper is a global market, and it is hard to escape the conclusion that the US DOJ and China’s MOFCOM considered essentially the same facts, and ultimately reached different conclusions, with the result that the stricter standard – MOFCOM’s – has been applied. We also note that the European Commission imposed a structural remedy relating to the market for zinc because of particularities of the European zinc market.

4.1.3.2 Difficulty of obtaining multi-jurisdictional clearances

Even if authorities apply the same standards, independent investigations in multiple jurisdictions can reduce the overall likelihood of global mergers being approved, and therefore raise the bar, cutting off many efficiency-promoting mergers that would otherwise be proposed. Fairly obviously, if a merger requires unanimous approval by authorities in all large jurisdictions, then the more such authorities there are, the less likely it is that the merger will proceed – and the less likely it is that the merger would be attempted in the first place.

This can be illustrated with an oversimplified and hypothetical example. Suppose that mergers have the same effects everywhere and all authorities apply the same standard: namely that they will approve mergers that are likely to raise welfare, and block those that are not. There are many mergers for which the facts and complexity of analysis make decisions uncertain: they are neither obviously harmful nor obviously harmless. These ‘borderline’ mergers can be considered to have a probabilistic chance of approval by competition authorities. A highly problematic merger might be considered to have a 20% chance of success, for example, evaluated before the merger is proposed.

Suppose that, considering the chances of success, businesses will propose a merger only if its chances of approval are 50% or better. Suppose further that each authority's assessment is independent of the others. Then if only a single authority makes the decision (as in a purely national case), will businesses propose mergers if the “true” probability that they will be cleared is 75% or greater. But for an international merger, more authorities independently need to approve.
Suppose there are five important jurisdictions that must approve for a ‘global’ merger to go ahead. To have a 75% chance of clearance by all five authorities, a proposed merger would need to have a probability of 94% of being approved by any one authority. So, if firms will only propose mergers that have a 75% chance of being approved globally, then only those mergers which are relatively safe bets – with a 94% chance or more of being regarded by any one competition authority as enhancing welfare – will be proposed. Global mergers with a probability between 50% and 94% of being cleared will not be proposed, because the chances of getting five approvals is less than the required level, even though each individual competition authority is more likely than not to approve. Such mergers are (by definition) welfare enhancing. But because they are not proposed, welfare will be lower than otherwise possible.

The multiplicity of authorities, each with the ability to veto a global merger, has much the same effect as a decision significantly to tighten the standards for merger approval. Yet while practitioners have debated and refined the appropriate standard for intervention for decades, some concerned about possible ‘chilling’ effects of over-enforcement, there has been very little discussion of how the need for multiple approvals might have an identical chilling effect on the largest global mergers.

4.2 Cross-border cartels

4.2.1 Scope for co-operation

Cross-border cartels exhibit substantial scope for co-operation between authorities, for example:

- Co-ordinating raids to ensure evidence is not destroyed. It is important that evidence be obtained through such raids in locations where the evidence is kept, which is often in the corporate headquarters, but at times in regional headquarters or other locations. For example, in the Marine Hose case, the US Department of Justice and the UK Office of Fair Trading co-ordinated raids in the course of their respective investigations. It is clear that the co-ordination does not necessarily extend to all countries in which evidence may exist.

- Sharing evidence or finding evidence located elsewhere than the initial investigating jurisdiction, especially when there is no leniency applicant or no waiver. At times, evidence could be gathered on behalf of another jurisdiction in order to strengthen that jurisdiction’s case.

- Assisting another agency by obtaining waivers from the industry. Co-operation often relies on waivers obtained from parties who provide information to the first agency in the context of an investigation.

- Mutual recognition of fines or prison sentences: An executive involved in furthering an international cartel affects consumers in different economies and may potentially be subject to a prison sentence, possibly sequentially, for the same act in multiple economies with criminal enforcement, in respect of the laws violated and commerce affected in that jurisdiction. Similarly, fines could be calculated based on a percentage of direct and indirect sales, meaning that a sale may, in effect, be fined twice. Mutual recognition of served prison time may limit a perception of excessive enforcement. For example, in the Marine Hose case, 72 criminal prosecutions occurred in two countries: the UK proceedings concerned only UK supplies and the US case applied to US commerce. A US judge allowed an offending executive sentenced by the UK courts to
serve time in prison in the UK. If the UK released the executive from prison earlier than a certain time deemed by the judge to be the US sentence, the executive would have had to go to a US prison to complete his jail term.

4.2.2 Consequences of lack of co-operation

If authorities are unable to co-operate effectively in investigating cartels, harmful cartel activity could go unpunished (so future harmful behaviour will not be deterred), additional costs could be imposed on the global economy, and consumers would be harmed. This can happen for several reasons.

- Some international cartels may simply be beyond the effective reach of the laws in the countries where they have their most pernicious effects. A striking example is provided by the beer market in Africa. In several deals, large beer producers effectively agreed to divide the continent up, with each given a near-monopoly in its own set of countries. As a spokesman for a major African beer company said about such a deal: “There may be antitrust laws at the national level, but none covering the continent. I don’t see what the problem is.”

- Some countries specifically exempt ‘export cartels’ from competition law, while many others will only investigate cartels if there are adverse effects within their own jurisdictions. Although most such export agreements probably serve more as legitimate marketing mechanisms than as cartels, when export cartels have market power, the effects can be substantial. For example, Jenny estimated that, between 2011 and 2020, China will pay an average overcharge of about US$900 million per year due to the cartelisation of the potash export market.

- Due to the absence of effective co-operation, multiple jurisdictions may repeat the same investigative steps, resulting in extra costs related to the investigations for business and costs to competition authorities from unnecessary duplication.

- Without effective co-operation between authorities, an investigating authority might in practice be unable to obtain information it needs from overseas authorities, especially if the companies it is investigating are headquartered elsewhere or witness to be interviewed are located outside the jurisdiction. There are important concerns about sharing confidential information across borders that can restrict the sharing of such information. Feasible forms of co-operation can be affected by the type of enforcement regime available for cartels, including whether a regime has criminal or civil/administrative systems in place and whether there is recourse to private action against cartels. One of the consequences of the refusal or absence of an ability to share such information is that many countries in which consumers have suffered harm from a global cartel are not able to prosecute the cartel for the violation that has occurred according to the laws of the countries. In fact, ultimately, most countries in which violations occur may not have access to the evidence necessary to determine the guilt or innocence of the parties involved. Ultimately, cartels may at times remain undiscovered due to lack of co-operation. This can be quite costly, as studies indicate that cartels that have been discovered can have large impacts. For example, Clarke and Evenett (2003) estimate that the vitamin cartel overcharges to consumers were about USD 789 million, while Levenstein and Suslow (2001) have found that the overcharges to developing countries of 16 international cartels amounted to approximately USD 16 billion.
4.2.3 **Risks of co-operation**

Co-operation is not without risks. One notable risk of co-operation is excessive enforcement, in which, for example, multiple jurisdictions might base their fines for cartel violations on the worldwide, as opposed to domestic,\(^75\) revenues in the relevant product line or multiple jurisdictions might ultimately put executives in jail for the same violations, without crediting time served in prison by violators in outside jurisdictions.

Another risk of co-operation is that documents containing legitimate business secrets will be made public, whether as a part of proceedings or by accident, by a jurisdiction other than the one that initially obtained the documents, resulting in possible damage to the affected company and risks for one or more authorities of violating laws protecting confidential information or business secrets.
5. Future developments

5.1 A gap in governance?

Competition law practitioners tend to believe that competition rules should be based on reasonably objective criteria and applied in a consistent, fair and transparent way. It is difficult to see that these criteria are fully satisfied in the way global merger outcomes are determined. Different authorities impose different remedies and some authorities are effectively able to unilaterally block a deal while many others are powerless to affect the outcome, regardless of the merger’s effects in their country.\(^\text{76}\) It is also difficult to see that these criteria are met with respect to global cartels or cross border unilateral conduct cases, for which relatively few authorities have the ability to obtain information sufficient for prosecution and fines are not levied in all the jurisdictions where there is harm.

Earlier, the paper noted the contrary merger review decisions by the British and French competition authorities over the 2013 Eurotunnel merger.\(^\text{77}\) Following those decisions, France’s transport minister announced that he would seek a meeting with his British counterpart to “arbitrate between the decisions of the two competition authorities”.\(^\text{78}\) As a spokesman for the UK Competition Commission pointed out,\(^\text{79}\) even if the Ministers were able to agree at such a meeting, it would not change the decision, which is the Commission’s alone to take and, ultimately, for the Competition Appeal Tribunal to review.

If decision-makers from the British and French authorities had sought to avoid reaching conflicting decisions, there would not have been a clear legal basis for them to reach an agreement to resolve the inconsistency.\(^\text{80}\) If a competition authority changed its decision explicitly to achieve consistency with the decision of an overseas authority, such a decision could well face a successful appeal if any party with standing objected. The result is that competition authorities are less likely to defer to decisions of other authorities.

More than 40 major cartels with an international aspect have been identified in recent years.\(^\text{81}\) Many, if not most, competition authorities where the law has been violated, have either not investigated in their own jurisdictions or did not have access to sufficient evidence to impose fines.\(^\text{82}\) As the ICN/OECD Survey on International Enforcement Co-operation showed, some jurisdictions had requested sharing of evidence but the evidence in question was not provided.\(^\text{83}\) While deterrence may be achieved by large fines from major authorities, the purpose of making the victim whole through damages is not met in the vast majority of jurisdictions, and the ability of authorities to enforce their domestic law is clearly hindered by the lack of effective information sharing for such matters.

At times, market allocations or cartel agreements may have been established outside the jurisdictions of predominantly small and poor countries, but with a direct effect on those countries. Successful prosecution would require gathering evidence from other jurisdictions and there is relatively little experience with small jurisdictions successfully obtaining, receiving or communicating such information across borders. As a result certain regional cartels may continue to have an effect. This is also the case for investigation of unilateral conduct by dominant firms which are located in one jurisdictions (where the core evidence is also likely to be located) but operate their businesses globally.
A gap in governance appears to exist both with respect to international co-operation for merger review and cartel investigations, as well as for abuse of dominance/unilateral conduct cases.

5.2 Trends

Looking to the future, some trends are likely to result in the problems outlined above becoming less severe in future years. In particular, continued convergence of substantive and legal standards is likely, building on the successful convergence between longer established authorities that has been seen in the last 10-15 years.

However, there are also reasons to believe the problem might become worse (in the absence of better methods of co-ordination between jurisdictions). The OECD/ICN Survey of International Enforcement Co-operation found that no country thought co-operation would become less common in the future and all of those who expressed an opinion felt that it would become more common. There are several reasons for expecting a future increase in co-operation and co-ordination.

Firstly, the process of economic globalisation is continuing. Today, there are few truly global businesses, and most economic activity remains local – particularly national. This means that the transformation of the world economy that we have seen so far, and described in the first part of the paper, is only beginning. There will be more global activity, and so there will be more global mergers and perhaps other sorts of competition cases too. Even if all jurisdictions apply exactly the same system, multiple independent decisions are likely to result in significantly greater externalities being imposed on the global economy, for example through chilling effects on international M&A activity, than we see today.

Secondly, as more authorities become more active in enforcement regarding global activity, lack of effective co-ordination tools would increase the risk that authorities will apply substantive rules differently in their enforcement practice over time.84

Thirdly, the newer competition authorities from large countries, such as those of India and China, are likely to become more active and more willing to impose remedies with global consequences. For example, China’s MOFCOM has largely applied behavioural remedies in its first years, a way to carve out a national remedy by dealing with national effects. If MOFCOM experiences the same difficulties with behavioural remedies as longer-established authorities have encountered, MOFCOM’s practice in this respect is likely to change. In 2013, India crossed the threshold of issuing decisions for 100 merger reviews. The increased activity of newer competition authorities is a natural and desirable outcome in itself, as competition law applies to more economies and covers a greater percentage of the world’s population. The side-effect of such beneficial developments, though, is increasing complexity in co-operation.

More non-OECD economies will become important players in the international antitrust community, as their economies come to represent larger shares of the world GDP and as their competition authorities start enforcing competition rules more vigorously (see Figure 21 below). In 1995, the US, EU and Japan accounted for about two thirds of world GDP – and about 95% of the GDP of countries with competition law. Consequently, co-operation among just these three jurisdictions would have covered almost all significant international antitrust matters. In 2014 that same trilateral co-operation would cover less than half of world GDP. By 2030 on reasonable projections,
those three economies will account for only 35% of world GDP. Beyond 2030, at least five jurisdictions would have to co-operate to reach the proportion of world GDP which could be achieved with just trilateral co-operation in 1995. Of course to reach 95% of those covered by competition law, one would need to include probably a hundred jurisdictions. This will pose a new and unprecedented challenge: how to coordinate with more jurisdictions, including newer ones.

Figure 21. GDP in world’s largest 50 economies: 1995 to 2030

Fourthly, the number of cross-border mergers is likely to increase in the future as is the number of cartels uncovered. As trade increases, and GDP increases, companies are likely to become more interested in cross-border mergers. Cartel formation is largely related to the existence of international trade. The growth rate in cross-border merger activity can be forecast based on OECD forecasts of future trade growth.\(^{85}\) During the period from 1990 to 2011 when trade increased by 300%, cross-border merger deals in Dealogic increased by 214%, from 3,513 deals to 7,523. This suggests that for every 100% increase in trade, there is an increase in cross-border mergers of 71.4%. World trade is expected to increase by 92% between 2011 and 2030.\(^{86}\) If cross-border mergers and acquisitions increase in proportion to worldwide trade increases predicted by the OECD, there would be 66% more cross-border M&A deals in 2030 than in 2011. Assuming the number of active competition authorities remains at least constant\(^{88}\), the co-operation complexity index would increase by 66% between 2011 and 2030.
Cartel investigations and prosecutions have the potential to increase substantially in the future, much like mergers. In particular, given that international trade can serve as a source that would displace a domestic cartel, it is plausible to believe that a large increase in international trade would be followed by a large increase in cross-border cartel creation and, ultimately, a comparably large increase in law enforcement against cross-border cartels. In the past, they increased faster than world trade, growing by 527% in the period 2007-2011 as compared with 1990-1994, while trade in 50-countries in our sample increased about 300% over the same period. If cross-border cartel enforcement increases at the same rate, in the future as in the past, there could be a 162% increase in cartel prosecutions between 2011 and 2030. If they increase at a lower rate, in line with world trade, cartel prosecutions would increase by 92%. Assuming the number of active competition authorities remains at least constant, the co-operation complexity index would increase by 92% to 162% by 2030.
6. Conclusion

Co-operation in the enforcement of competition law has improved significantly since 1990. More countries are actively co-operating and efforts to converge in substantive approaches to competition law enforcement have borne fruit. While bilateral co-operation provides many satisfactory results at the moment, with rapid change in competition law enforcement and increasingly more connected economies, it is appropriate to consider whether new approaches to co-operation will be needed in the future.

Future challenges for co-operation arise from the significant increases in the complexity of co-operation as the world economy continues to globalise and as the newer competition authorities in fast-growing emerging economies become more active. Methods and tools of co-operation could usefully evolve in order to address future challenges. From 1990 to 2011, while the complexity of co-operation has increased 20 times or more, the legal mechanisms for co-operation have hardly evolved. The need for effective co-operation could outstrip the ability of existing, bilateral, mechanisms to cope.

As we have shown, there are large costs that can arise from the lack of co-operation and coordination and these costs are not simply administrative. Substantial benefits would arise from internalising these costs via improvements in the enforcement of competition laws across borders.

This paper does not propose or advocate specific actions, but presents a list of possible improvements, without suggesting that the list is exhaustive or agreed.90 Options include:

1. Improved bilateral co-operation, for example to allow exchanges of confidential information between enforcers;

2. Developing standards for legislative/regulatory frameworks that would enable sharing of information and include legislative protections for information received from counterpart regulators;

3. Developing common form waivers and suggestions to facilitate the use of such waivers;

4. Adopting multi-lateral instruments that address the most pressing needs for co-operation. These could relate, for example, to sharing information, merger notification, or convergence of leniency policies for cartel investigations;

5. Developing international standards for formal comity, such as a legal instrument defining criteria for requesting an enforcement action in or assistance to another authority, and clarifying participating authorities’ comity obligations;

6. Allowing authorities to choose to recognise the decisions of other competition authorities in the investigation of cross-border matters. There could even be an agreement for giving non-binding deference to one ‘lead authority’; and

7. Reaching a multi-lateral agreement for exchange of information, comity and deference standards based on jurisdictions voluntarily opting in to the agreement.
Continuing and deepening the existing system of bilateral co-operation is important. However, making it work going forward will be increasingly complex, as business becomes more globalised, spanning more jurisdictions enforcing competition law. Governments may want to consider whether new approaches to international co-operation in enforcing competition law are required, in the face of this challenge. These might include, for instance, developing general standards designed to promote both convergence in substance and procedure as well as greater co-operation and co-ordination that could be applied in the context of differing national legal systems around the world.
Notes

1. The International Competition Network (ICN) now has 126 members from 111 jurisdictions (Vision Statement by Steering Group Chair Andreas Mundt, September 2013).

2. The most notable exception to this is the European Commission’s DG Competition, with competition powers across the European Union that are actively exercised on a regular basis.


4. Abuse of dominance is not treated in depth here, due to absence of systematic data and a lesser frequency of co-operation; many of the conclusions for cartel and merger law enforcement also apply to this element of competition law enforcement, for which cross-jurisdictional disagreement can create particularly complex situations for international businesses. Co-operation on abuse of dominance cases may be increasing over time and enhancing such co-operation may yield substantial benefits to businesses operating with strong market positions across multiple jurisdictions.

5. More information on the recent work in this area by the Competition Committee and on the objectives of the Committee’s strategic project on international co-operation can be found at www.oecd.org/daf/competition/internationalco-operationandcompetition.htm

6. According to its last mandate, WP3 shall enhance the effectiveness of competition law enforcement, through measures that include the development of best practices and the promotion of co-operation among competition authorities of member countries.


8. The Recommendation invites Member countries to improve co-operation by adopting positive comity principles, under which a country could request that another country remedy anti-competitive conduct that adversely affects both countries. It recognises that Member countries’ mutual interest in preventing hard core cartels warrants co-operation that might include sharing documents and information in their possession with foreign competition authorities. It also recognises the benefit of investigatory assistance in gathering of documents and information on behalf of a foreign authority. The Recommendation also encourages the review of obstacles to effective co-operation with respect to hard core cartels and consideration of actions, including national legislation and/or bilateral or multilateral agreements or other instruments, to eliminate or reduce them.


10. Sporadic co-operation is defined as co-operating on less than five cases from 2007 to 2012.

11. Individual cases would involve co-operation of at least 2 authorities and potentially more, so the number of cases will not match the number of authorities with competition experience shown in Table 1.

12. Partial figures for 2012 confirm the trend, with 50, 89 and 18 instances of co-operation for cartels, mergers, and abuse of dominance, respectively, part of the way through the year.


15  See www.internationalcompetitionnetwork.org/.


17  Australia, Brazil, Canada, Chile, the European Union, Germany, Israel, Japan and Mexico. As mentioned above, however, competition authorities may co-operate also on the basis of non-competition specific agreements (such as FTAs) or on the basis of softer legal instruments such as MOUs. This is not to underestimate the increasing international co-operation activities that are taking place with other jurisdictions. Many large and established agencies increasingly cooperate with a large number of partners worldwide, depending on the case and the (product and geographic) markets concerned. In particular jurisdictions like Brazil, South Africa, China and India are increasingly involved in international co-operation.

18  US, Canada, Japan and the Republic of Korea.

19  Both the US and the EU, however, have Memoranda of Understanding with other competition authorities, including China and India.

20  In practice, however, especially in the field of mergers and merger remedies, one could identify a number of "de facto" leading agencies, as some agencies may decide to follow or accept the remedies negotiated by other (leading) agencies.

21  OECD (2014) “OECD @ 100: Policies for a Shifting World”.

22  The fifty countries for which trade is calculated are those that are members of the OECD, G20, BRICS and EU.

23  OECD (2014) “OECD @ 100: Policies for a Shifting World”.

24  The amounts have been converted to constant 2005 US-dollars using the private final consumption expenditure deflator from the OECD Economic Outlook database.

25  Trade is measured as exports in bilateral trade. Trade within the European Union is excluded. Trade as a percent of GDP can exceed 100% because GDP measures only final output, while traded goods can cross borders multiple times and be counted each time.

26  The Dealogic M&A Analytics package provides comprehensive and real-time coverage of all transactions and deal structures globally, including public and private mergers and acquisitions, divestments, recapitalisations, repurchases and all private equity related M&A activity. The criteria we chose to identify cross-border transactions with competition relevance do not align precisely with the number of transactions that are subject to a merger filing in reality. For example, our definition does not include mergers which may involve parties who are both headquartered in the same country but operate across many jurisdictions; similarly it does not include transaction where the acquisition of control or a significant influence over the target is achieved through the acquisition of less than 50% shares in the target company. The criteria we chose were dictated by the information available in the Dealogic M&A database.

27  Mergers between companies located within Member States of the EU are not categorised as cross-border for the purposes of this analysis.

The year of the competition law is the year in which each country's competition law was enacted, not necessarily the date the law came into force. For a law to be considered a competition law for this purpose, the law needed to contain abuse of dominance, merger control or cartel enforcement. In addition, the law needed to establish an institutional mechanism for enforcing the law defining the powers of the authority and the procedure for implementing the law.

The year of establishment of the competition authority activity is the year in which a jurisdiction's competition authority was established and actually started to play a role envisioned by the competition law. The competition authority is considered established in a given year if it has appointed staff or commissioners. However, if the competition authority limited its role to that of a price regulator, the body would not yet be classified as an established competition authority.

Jurisdictions with competition law enforcement include not only countries and economies, but also regional entities, such as the European Commission’s DG Competition, the COMESA Competition Commission and others. The authorities include 7 regional authorities, namely for the Andean Community, CARICOM, COMESA, MERCOSUR, EU, EFTA, and WAEMU.

In this note a cross-border cartel refers to comparable activity being carried out in at least two jurisdictions by the same participants.

The PIC database is a highly detailed list of cartel cases around the world produced by Professor John Connor.

The number of deals in the 1990s is not necessarily indicative of worldwide trends, due to high M&A deal activity within Europe from increasing regional reach of companies. In principle, countries must file papers describing their merger and acquisition transaction with the European Commission’s DG Competition when the combination of companies would affect commerce by more than a minimum amount in multiple EU countries. The merger filing thresholds and standards were changed in 2003. Merger control was introduced in 1990, so the first year’s report of 2 filings is not representative of a normal full year, hence our focus on 1991 as a starting point for comparisons with current filing levels.

DG COMP issued 26 cartel decisions between 1990 and 2000. Between 2001 and July 2013 the number of decisions issued by DG COMP raised to 74.

We have used the amount of the fine as imposed by the Commission and not corrected for changes following judgments of the Courts (General Court and European Court of Justice). We also considered only cartel infringements under Article 101 TFEU (previously Article 85 and 81 respectively of the Treaty). When decision and fines concerned infringements of Article 101 TFEU and of Article 102 TFEU (previously Articles 86 and 82 respectively of the Treaty), we considered only the amounts for the Article 101 TFEU infringement.

The years in the figure are fiscal years, not calendar years.

See Table 1.

Throughout this note, by ‘national’ we mean pertaining to a single jurisdiction. This could include multinational groupings that operate as a single jurisdiction for the purpose of competition law enforcement, most obviously the European Union.

Such substantive differences are considered here to include differences in legal and procedural matters, such as where the burden of proof lies (e.g., regarding efficiencies).

This very well-known case has been discussed in many places. See for example Eleanor Fox’s account in Fox, E. M., & Crane, D. A. (2007). Antitrust stories. Foundation Press. Note that the General Court overturned the finding relating to complementary products, but upheld the EU Commission’s decision on other grounds.

Bergman, M. A., Coate, M. B., Jakobsson, M., & Ulrick, S. W. (2010). “Comparing merger policies in the European Union and the United States.” Review of Industrial Organization, 36(4), 305-331. The paper finds that “When limiting the analysis to dominance/dominant firm transactions, we find that, were the EU to examine the US’s mergers, the predicted EU challenge rate would be roughly 12 percentage points higher than the actual US rate.” The paper observes nonetheless that while “it is possible to characterize the EU’s dominance regime as more aggressive than the US’s, it may not be the case that the EU’s overall policy is more prone to challenge. An overview of enforcement decisions reveals that the US actively challenged mergers that tend to create or enhance collusive oligopolies, whereas the EU brought very few such cases.”

The UK and French authorities reached different views on a merger between salmon producers, in part because French consumers regard Scottish and Norwegian salmon as distinct, while British consumers do not - so the market is narrower in France. See Pan Fish ASA / Marine Harvest N.V. merger inquiry, Competition Commission (UK), 2006.

The ‘true’ level of disagreement is surely still greater, as most people prefer to agree than to disagree, so dissenting or minority opinions will normally represent a rather significant disagreement, rather than decision-makers different final decisions on a finely-balanced case.

The vast majority of mergers were cleared without the need for a detailed investigation or Commission vote.

OECD data, compiled from the public record of FTC decisions.


Whether it would have a duty to do so, or on the contrary be forbidden to do so, will depend on the precise wording of the legislation under which it operates.
For example, the Austrian delegation at an OECD roundtable on remedies is quoted in the summary of discussion as noting that in Austria “most of the remedies imposed were behavioural in nature, which is somewhat surprising in contrast to other jurisdictions which impose mostly structural remedies. There is no clear explanation for this fact. While in some cases behavioural remedies may have simply been more appropriate, in others, they may have been a necessity since, due to Austria’s relatively small size, the assets that would have been subject to a structural remedy were located outside the jurisdiction.” See OECD Best Practice in Competition Policy, Remedies in merger cases (2011), p. 291

Dräger Medical AG / Air-Shields Hillenbrand Industries Inc. merger inquiry, Competition Commission (UK), 2004.


Of course, even medium-sized countries will be important markets, regionally or for some specific products.


See Drager/Air-Shields, decision by the Competition Commission (UK), 2004.

Eurotunnel / SeaFrance merger inquiry, Competition Commission (UK), 2013.

Autorité de la Concurrence, Decision 12-DCC-154 of 7 November 2012

On appeal, the UK’s Competition Appeal Tribunal quashed the Competition Commission’s decision and required the Competition Commission to reconsider whether or not the transaction constituted a merger situation but rejected the parties’ other grounds of appeal. (Competition Appeals Tribunal [2013] CAT 30, Groupe Eurotunnel S.A. v. Competition Commission and SCOP 4 December 2013.) The quashing does not affect the main point that two jurisdictions might not be able to coordinate and, in such a situation, the strictest standard will prevail.

OECD Economic Outlook 2013 reports USA GDP at $13.8 trillion, 22% of World GDP at $62.3 trillion. The EU is the second largest economy and China is the third.


See for example “The Long March: The final hurdle is cleared in Glencore’s takeover of Xstrata as Chinese Regulators give merger the go ahead”, Eversheds, 17 March 2013.

See for example “China Clears Glencore's Acquisition of Xstrata Subject to remedies”, WilmerHale Publications and News, 26 April 2013.


These probabilities could be thought of, for example, as the expert advisors’ opinions on the likelihood of successful clearance to the potential merging partners’ boards in advance of the announcement. Of course, merger decisions are not really probabilistic, in the sense of being random, but in advance of decisions advisors often express likelihoods of success in such terms.

Note that while independence may be a strong assumption, the view that probabilistic distributions of approval likelihood exist, given the same facts and legal structure, can be
supported by the fact that in authorities with Commissions that vote on how to proceed, there are differences of view between Commissioners with non-trivial frequency.

69 Then the probability that a perfectly “borderline” case with a 75% chance of obtaining all five approvals is $0.75^5 = 0.24$. So only 24% of such global mergers would be able to proceed, even though 75% of them would be welfare enhancing.

70 Because $0.944^5 = 0.75$.

71 Of course, others have been concerned about under-enforcement and might therefore be tempted to argue that this chilling effect is a good thing. No doubt, there are some mergers that should not go ahead on competition grounds (or are simply inefficient and welfare-reducing), but are approved. However, there is no reason to suppose that the mergers that are blocked because of the chilling effect arising from requiring multiple approvals will be those that are least beneficial. The point is that in practice international firms face a tougher merger regime than purely domestic ones, which seems completely arbitrary.

72 A press release from US Department of Justice states “The U.S. plea agreements in effect provided for concurrent prison sentences in the United States and in the U.K. Thus, because the U.K. prison sentences were longer than the sentences recommended in the U.S. plea agreements, the defendants will not be required to serve prison sentences in the United States.” (See Press Release, 28 July 2008, “Italian Marine Hose Manufacturer and Marine Hose Executives Agree to Plead Guilty to Participating in Worldwide Bid-rigging Conspiracy” found at www.justice.gov/opa/pr/2008/July/08-at-663.html on 19 December 2013.


75 While many jurisdictions do take into account only the turnover generated in their jurisdiction for purpose of setting fines, criteria might diverge as to how to allocate turnover to one jurisdiction, or there may be situations (such as online sales) where the geographic allocation of turnover might result difficult in practice.

76 The nature of a remedy may inherently be behavioural when productive assets are located outside the remedying jurisdiction.

77 Other cases that illustrate how multiple authorities can reach different outcomes include merger cases such as Boeing-McDonnell Douglas, GE-Honeywell, and Glencore-Xstrata.

78 Reported in Global Competition Review (GCR), 11 June 2013.

79 Ibid. “The UK has an independent competition regime designed to exclude government involvement in decision-making – and we have a duty to take the necessary action to protect competition and the interests of customers. In that context, it’s difficult to see what the role or purpose of such a meeting would be.” (UK CC spokesman, quoted by GCR).

80 They might be able to convince one another that the facts or the analysis in the other’s decision were wrong, of course, and thus agree on the case after all. Competition authorities are understandably keen to avoid reaching conflicting opinions, and communication between them on factual and analytical matters can help. However, that is a different matter from ‘cutting a deal’ when each has decided (before or after publishing that decision) where its analysis of the case has led it. It is particularly worth noting that the conflicting decisions were reached within a geographic area that was covered by a regional competition authority, suggesting that the existence of an effective and well-
staffed regional authority does not eliminate the possibility of disagreement within the region.

81 The figure is based on data from EU cartel enforcement cases (Figure 15) that involve participant companies based on other continents (and potentially some participants based in the EU).


84 See the first reason for disagreement mentioned above, “Different substantive rules”.

85 See OECD (2014) “OECD @ 100: Policies for a shifting world”.

86 Based on growth rate of 3.5% estimated in OECD (2014) “OECD @ 100: Policies for a shifting world”.

87 The calculation is that (2.14/3.00)*0.92=0.66.

88 This assumption of constant activity is conservative, as the paper has previously argued that the number of active authorities is likely to increase, as younger authorities enforce the law more vigorously.

89 The calculation is that (5.35/3.00)*0.92.

90 Some of the topics listed in this paragraph are on the agenda for future discussion in the Competition Committee. It should be noted that while they have been discussed and debated, there is no agreement at this point, on the best way forward. The purpose of this paper is not to pre-judge future discussions, but to provide a non-exhaustive list of possible options.
Annex
The Co-operation Complexity Index

Avoiding inconsistent decision making is a key goal for current and future competition law enforcement. Bilateral co-operation is the predominant method of achieving that goal today. While many observers have a sense that the complexity of co-operation between competition law enforcement authorities has increased dramatically in recent decades, the measurement of such complexity is difficult. Given the prevalence of bilateral co-operation for competition law cases, this note proposes to measure the complexity of co-operation by focusing on the number of bilateral points of contact that would need to be made in cross-border cases. Over time, the number of necessary bilateral interfaces has increased substantially, because both the number of active competition authorities (as shown in Section 3.1) and the number of cross-border cases have increased (See Section 3.2). These developments are positive in themselves; their direct consequence is increased complexity of co-operation, which is not a negative development but simply one that must be accepted.

The “co-operation complexity index” can be calculated as a function of the number of active authorities and cases, by calculating the number of potential interfaces of co-operation per case. An “interface for co-operation” is deemed to exist when two authorities are both dealing with the same case at the same time and could cooperate, formally or informally, with each other. This is not a measure of actual co-operation but of potential co-operation. In the absence of a single global enforcement authority, interactions are considered bilateral, which is consistent with the finding of the OECD/ICN Survey on International Enforcement Co-operation, as discussed in Section 2. Exchanges of information between authorities, for example, may occur on a bilateral basis, rather than a multilateral basis. As the number of authorities increases, the total number of potential bilateral interfaces increases in a non-linear fashion. The Table below illustrates how the number of potential bilateral interfaces of co-operation varies as a function of the number of competition authorities. While increasing presence of regional authorities such as the European Commission or WAEMU, with exclusive competencies, could reduce the complexity of bilateral co-operation, the creation of exclusive competencies at a regional level has not been a notable trend.

1 Regional authorities may have some exchange of information built in to their structure with their constituent members, as in the EU.

2 The number of interfaces of co-operation is calculated in Table 2 below as a function of the number of competition authorities. When there are two authorities (A, B), there is only one potential interface of co-operation (A-B). With three authorities (A, B, C) pursuing the same matter, there are three interfaces of co-operation (A-B, B-C, A-C). With five authorities, there are 10 interfaces. With 10 authorities, there are 45 interfaces. With 120 authorities, there are 7,128 interfaces.
Table A1. Interfaces for co-operation on single investigation with cross-border impact

<table>
<thead>
<tr>
<th>Number of Authorities</th>
<th>Interfaces of Co-operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>20</td>
<td>190</td>
</tr>
<tr>
<td>30</td>
<td>435</td>
</tr>
</tbody>
</table>

Source: OECD

In practice, in the 1990s, most co-operation on global cases occurred bilaterally between just two competition authorities (i.e., the EU and the US). Thus in practice, there was one bilateral interface. While different outcomes on cases were still possible and did occur, management of a single interface per global case was not complex and certainly simpler than the use of alternative coordination mechanisms.

In 2011, by contrast, there were arguably 13 competition authorities with regular co-ordination, as described in Table 1 which shows co-operation between 2007 and 2012. According to the report, perhaps five authorities had what could be considered very regular co-operation, which would imply 10 interfaces of co-operation. The number of competition authorities effectively involved in co-operation on cross-border cases increased from 2 in the 1990s to, say, 5 today, that represents an increase in potential interfaces of co-operation from 1 to 10, or a 1,000% increase in complexity. At the same time, the need for international co-operation has mushroomed, notably due to an increasing number of cross-border mergers and cross-border cartels. The costs and complexity of bilateral co-operation may be one factor that would reduce the interest of competition authorities in co-operation. The change in the co-operation complexity index is calculated below for mergers and cartels separately.

The co-operation complexity index for global M&A cases in a given year $t$, $I_t$, is given by the formula:

$$I_t = i(n_t)c_t$$

where $i(n_t)$ is the function of the number of authorities active in time $t$, $n_t$, and the number of global cases taking place in a given year, $c_t$.

3 For international mergers, small countries may often not engage in serious or full-fledged review, in part because of perceived and actual difficulties in putting into effect a merger blockage or remedy.

4 This implies 78 potential interfaces of co-operation for a global case.

5 Regional authorities such as the European Commission’s DG Competition with the European Co-operation Network (ECN) substantially reduce the number of bilateral interfaces by concentrating the coordination of many authorities through a single regional entity.
Taking the number of cross-border Fortune top 50 mergers, which increased from about 65 in 1995 to 153 in 2011, as shown in Section 3.2.1, supposing for illustration that each of these mergers and acquisitions featured global product overlap requiring investigation, and noting that the number of active authorities increased from 2 to 5 over the same period, the co-operation complexity index has risen from (1)*(65)=65 to, conservatively, (10)*(153)=1,530, representing an increase of 23 times between 1995 and 2011. This could also be interpreted as an increase in administrative costs of inclusive bilateral co-operation. The cost increase, to the extent there is one, may not be completely proportional to the increase in the number of potential interfaces, notably because there may be economies of scale in co-operation. These figures are intended to illustrate the increased complexity of co-operation, conditioned on the number of authorities that are active in co-operation and on cases being global in scope. To the extent that authorities are not actively cooperating with all other authorities or that cases are purely regional, the figures represent an upper bound.

Similar to the potential for increased co-operation on merger cases, the number of opportunities for cartel enforcement coordination has also increased substantially in recent years, from (1)*(3)=3 to (10)*(14)=140. These figures imply an increase in the complexity of co-operation index by a factor of about 53 times between 1990-1994 and 2007-2011.

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6 The number of global M&A deals that may give rise to serious investigation by multiple competition authorities is difficult to quantify. Nonetheless, the number of cross-border mergers appears to have doubled or tripled between 1995 and 2011, whether focusing on deals overall or deals involving the largest companies (the top 50 of the Fortune Global 500).

7 These figures assume that the 3 and 14 cartels were all global in nature, which has not necessarily been proven.
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Challenges of International Co-operation in Competition Law Enforcement

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Cross-border business activities have increased together with the number of new competition agencies worldwide bringing new challenges to international co-operation in competition law.

This paper prepared in the framework of the OECD Initiative on New Approaches to Economic Challenges presents evidence of the complexity of co-operation between competition agencies and the likely challenges they will encounter in the future to enforce competition law and co-operate effectively.

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