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COMPETITION AND POVERTY REDUCTION

Contribution from the WTO

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English - Or. English

COMPETITION AND POVERTY REDUCTION: A HOLISTIC APPROACH

-- WTO Secretariat[*] --

1. Introduction: Markets, poverty reduction and the role of competition policy

1. Today, there is little doubt that well-functioning markets are a *sine qua non* for development, economic growth and the reduction of poverty. The efficient performance of markets is essential to generate improved standards of living for citizens and to provide the resources necessary for state action to provide public goods and address other relevant concerns. Moreover, the ability to participate in markets - free of artificial and unnecessary restrictions on such participation - is arguably an important dimension of human rights (Sen 1999; see also Anderson and Wager 2006).[1]

2. At the same time, there is increasing recognition that markets cannot be counted on to deliver results that enhance the welfare of all citizens, in the absence of appropriate *governance mechanisms*, including relevant laws, institutions and public and business environments. Indeed, it is arguable that the promotion of "market-oriented reforms" without such legal and institutional safeguards is a self-defeating strategy that risks undermining support for globalization and the market economy worldwide (Stiglitz 2012 and 2007). As such, the propagation and cultivation of appropriate laws, institutions and enabling environments figure importantly in cutting-edge thinking on development and are central to efforts to alleviate poverty in our time (see, e.g. Collier 2008; Rodrik 2012; and Sachs 2005).

3. Competition law and policy represent an essential component of the governance mechanisms that are required for development and poverty reduction. From the standpoint of consumers (including, significantly, business users), competition law enforcement provides an essential deterrent to cartels and other practices that restrict output, raise prices and thereby erode purchasing power and diminish the welfare of citizens. This is no less important in poor countries than in richer ones.

4. In fact, there are reasons for believing that less developed economies are more, rather than less, vulnerable to anticompetitive practices than developed economies. The reasons include the existence, in many such countries, of some or all of the following conditions: (i) high "natural" entry barriers due to

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[1] Sen (1999, p. 6) observes as follows: "The ability of the market mechanism to contribute to high economic growth and to overall economic progress has been widely—and rightly—acknowledged in the contemporary development literature. But it would be a mistake to understand the place of the market mechanism solely in derivative terms. As Adam Smith noted, freedom of exchange and transaction is itself part and parcel of the basic liberties that people have reason to value."

poor business infrastructure, including distribution channels; (ii) regulatory and licensing regimes that unnecessarily impede the entry and success of new entrepreneurs; (iii) inadequate investment in the institutions of competition law and policy, and supporting learning and advocacy activities and fora; (iv) asymmetries of information in both product and credit markets; and (v) a greater proportion of local (non-tradable) markets (Stiglitz 2007; Anderson and Jenny 2005; Dutz 2002). For these reasons, the citizens of developing and least developed countries are, in many cases, more vulnerable to anti-competitive practices than those in developed countries, and have an acute need to be protected against cartels, abuses of dominant position and anti-competitive mergers.

5. Fortunately, over the past decade, major strides have been made in the adoption and implementation of effective national competition laws in developing, transition and even least developed economies. This trend has been reinforced by extensive capacity-building efforts on the part of relevant international organizations such as the OECD, the International Competition Network (ICN) and UNCTAD in addition to civil society organizations such as the Consumer Unity and Trust Society (CUTS). As a result, there is much to celebrate with respect to the building of competition law enforcement capacity in many such countries.

6. It would, however, be wrong to assert that competition law and policy have, as yet, fulfilled their potential as a tool of poverty reduction. Even in the area of competition law enforcement, much remains to be done to promulgate optimal approaches and build related institutional capacities. Competition policy can, moreover, contribute to poverty reduction and welfare gains in developing countries in ways that go beyond competition law enforcement *per se*. In some cases, these applications of competition policy can be influenced by but require the participation of other institutional actors. In other cases, new forms of international co-operation may be needed.

7. For example, the pro-competitive restructuring of national infrastructure sectors - often led by the advocacy activities of competition agencies, but also reflecting broader state initiatives and actions - can be a vital tool in enabling exporters based in poor countries to become commercially successful. Much evidence suggests that the failures of market liberalization can, in many cases, be traced to a lack of complementary internal reforms (Osakwe 2001; Anderson and Jenny 2005; Qaqaya and Lipimile 2008). Equally, the liberalization of government procurement markets through the elimination of unnecessary restrictions on the types of suppliers who can compete can substantially enhance possibilities for effective competition, and make bid rigging more difficult. By delivering greater value from the investment of public resources, this can augment governments' ability to address the underlying causes of poverty through investment in schools and universities; hospitals and public health facilities; and physical infrastructure that is essential for development such as roads and railways, port facilities and airports.

8. While competition agencies can play an important role in advocating such measures, typically, their implementation will require the involvement of other arms of government. Competition policy can also assist in identifying and addressing potential monopsonistic practices in global supply chains, which can make it more difficult for developing country producers to take maximum advantage of market access opportunities created though trade liberalization. These and other dimensions of competition policy as a tool of poverty reduction, which go beyond the routine enforcement of national competition laws, are the main focus of this paper.

9. To say that competition policy is essential for poverty reduction is *not* to endorse particular approaches to such policy, nor to suggest that solutions that have proven advantageous in some jurisdictions are universally applicable. Indeed, experience counsels against any attempt to impose uniform approaches. Rather than advocating any such course, it is argued here that the effective application of competition policy as a tool of poverty reduction requires careful attention to local market conditions and institutional constraints.

10. Expanding on the above, five possible principles for the effective application of competition policy as a tool of poverty reduction are put forward below. These principles build upon and seek to integrate the path-breaking work on related issues that has been done by the OECD, the ICN, UNCTAD and CUTS in recent years, in addition to the earlier work done on these topics in the WTO Working Group on the Interaction between Trade and Competition Policy when that body was active from 1997 through 2003.[2] These principles by no means constitute a "harmonized" approach; rather, they stress the importance of local market conditions and institutional constraints in prioritizing initiatives and defining the limits of the possible. Together, these principles comprise the "holistic approach" which is referenced in the title of this paper:

- First, poorer societies do not have the same institutional endowments and should not necessarily be expected to adopt the full panoply of tools that are used by developed jurisdictions in the enforcement of competition law. Rather, the focus should be on approaches that are relatively easy to implement but have a track-record of being effective and are economically sound, in addition to a strong emphasis on progressive learning and institution-building to enable strengthened application of relevant policies, over time.

- Second, meaningful competition policy reforms and legislation - like other aspects of "good governance" - cannot be successfully imposed from above. Rather, if such reforms are to be successful, public acceptance and support is critical (Rodrik 2012). Educational and advocacy activities relating to such reforms - including but not necessarily limited to the activities of competition agencies - are of vital importance. Indeed, to enable competition institutions and policies to "take root", the relevant educational and advocacy efforts will need to extend beyond the enforcement agencies themselves, to encompass civil society, legislatures, universities and think-tanks, and government ministries other than those concerned with competition law enforcement per se. The creation of "learning institutions" that track and advocate appropriate action in particular national contexts over time can make a vital contribution. In addition, the related work carried out in international fora such as the Global Forum on Competition, the ICN and UNCTAD in addition to relevant civil society organizations can provide an important support for the necessary efforts at the national and local levels.

- Third, in our view, and possibly somewhat more controversially, competition policy needs to address the needs of the citizens of poorer societies in their capacities as producers (i.e., as purchasers of raw materials and intermediate goods for further processing and as the users of public and business infrastructure services) in addition to their capacities as final consumers/households. While the preservation and enhancement of the purchasing power enjoyed by final consumers is undoubtedly crucial to the goal of poverty reduction, efforts to enhance living standards particularly in developing countries will only be successful if citizens have sustainable means of earning their livelihoods and are provided with improved opportunities for participation in the local and global economies. There are, indeed, many indications that a large proportion of instances of anti-competitive practices affecting developing countries relate to markets for business input goods and services (WTO Working Group on the Interaction between Trade and Competition Policy 1998). Consequently, the vigorous enforcement of competition law in relation to practices and market structures that unnecessarily raise business input costs and/or impede access to markets is likely to be central to the role of competition policy as a tool of poverty reduction.

[2] The WTO Working Group on the Interaction between Trade and Competition Policy was established at the First WTO Ministerial Conference, held in Singapore in December 1996. The Group remains in existence but has been formally "inactive" since 2004, pursuant to a decision taken by the WTO General Council.

- Fourth, "competition policy" is broader than just "what competition agencies do", including both their enforcement and advocacy activities: rather, it includes the full spectrum of measures that governments employ to enhance competition and improve the performance of markets (see also Anderson and Khosla 1995). Access to the full range of such measures, including, where appropriate, structural reforms that are implemented through the passage of legislation and/or executive actions by bodies other than national competition authorities is important to ensure meaningful poverty reduction. International rules may also have a role to play, in some cases (see discussion of the role of international rules in the telecommunications sector in Part 0below).

- Fifth, in order to address the challenges posed by the changing landscape of competition policy worldwide, new forms of international co-operation may need to be considered. To date, the main focus of international efforts to foster co-operation in the field of competition law and policy has been on the promotion of voluntary co-operation between competition agencies in relation to enforcement policies and specific cases, in addition to extensive general capacity-building efforts involving organization such as the OECD, the ICN and UNCTAD in addition to bilateral efforts. There is no doubt that these efforts have been immensely beneficial and need to be continued and, where possible, intensified. A question for the future is whether other forms of cooperation may also be needed/warranted, for example to fill possible jurisdictional gaps relating to matters such as export cartels (see Jenny and Mehta 2012) and/or to achieve mutually welfare-enhancing outcomes in relation to the promotion of competition where transborder markets are involved and/or joint action by the relevant governments is required.

11. This paper outlines various dimensions of such an approach to competition policy as a tool of poverty reduction, taking account of the considerations noted above. The remainder of the paper is organized as follows: Part 0 examines the role of market-oriented reforms in public and business infrastructure sectors, particularly in the context of developing and transition economies. This includes a discussion of the potential related contribution of international rules and initiatives in some cases. Part 0extends the analysis with a discussion of the complementary roles of competition law enforcement and market liberalization in public procurement markets, and the importance of each for poverty reduction. The suggestion is made that neither tool (competition law enforcement or market liberalization) is likely to generate optimal results in the absence of the other. Part 0considers various related dimensions of competition policy in relation to public health objectives, and their relation to poverty reduction. Part 0considers the issue of possible monopsonistic practices in international supply chains that may affect the ability of developing country producers to reap gains from participation in international markets, and the role that competition policy can play in this regard. Part 0rounds out the discussion by reference to the enduring issue of international cartels. The paper concludes with some observations regarding the future of international co-operation in the competition policy sphere.

2. Pro-competitive reforms in infrastructure sectors as a tool of poverty reduction in developing and transition economies[3]

12. Infrastructure services, including transportation, energy and telecommunications, account for a large proportion of the costs of export-oriented and other developing and transition economy businesses. They are also vital for household consumers in their daily activities. For this reason, infrastructure investment is increasingly seen as a key vehicle for enhancing the development prospects of low - and middle-income countries, and the provision of infrastructure services has rightly emerged as a primary focus of development assistance. For example, infrastructure now accounts for about 40% of the World Bank Group's commitments. Overall, there is no doubt that sound infrastructure investments can make a big difference to countries' development prospects: for example, in recent years, enhanced public

[3] See also International Trade Centre (R. Anderson, F. Jenny and A. Müller, principal authors) (2012).

investment in infrastructure has been a key factor underpinning rapid growth and a decrease in trade costs in Asian emerging economies (Brooks and Hummels 2009).

13. The efficient provision of infrastructure services involves many challenges, including the adequacy of public finances and the efficiency of their allocation through e.g. public procurement processes and institutions (Anderson, Kovacic and Müller 2011; see also Part 0below). Access to the best available technology, whether sourced from home or abroad and whether financed by public or private capital, is another crucial element. In many cases, however, success will also depend crucially on addressing anti-competitive behaviour of enterprises (firms) involved in the delivery of related services, and on the creation of competitive market structures, where possible.

14. Historically, key infrastructure services, whether in the fields of transportation, energy or telecommunications and in both developed and developing economies, were often provided by monopolies. While such monopolies occasionally emerged through monopolistic or predatory behaviour by the firms themselves, they were most often established through legislation or by government grant. Frequently, the combination of monopoly power and, where present, public ownership has resulted in less-than-satisfactory performance, with non-competitive rates, inadequate service offerings or a lack of innovation or readiness to adopt improvements in technology as they become available. This, in turn, has directly undermined the competitiveness of developing country business users.

15. Addressing sub-optimal performance in infrastructure sectors due to a lack of competition can require the application of a variety of remedial measures. In many cases, governments' first recourse -- particularly in the transition economies of Central and Eastern Europe but also in developing economies in Africa, Asia and Latin America -- has been to privatize the relevant entities, seeking thereby to invigorate and infuse them with the dynamism that is often associated with private ownership. Experience has shown, though, that this can be a trap: the mere privatization of state-owed monopolies typically will not yield improved performance, if measures are not also taken to expose such enterprises to effective competition (Beato and Laffont 2002; Kessides 2004; Anderson and Jenny 2005).

16. In fact, experts increasingly believe that exposing infrastructure service providers to competition is at least as important in improving performance as the injection of private capital financing, and should, where possible, precede rather than follow privatization (see, e.g. Kessides 2004; International Trade Centre 2012). Of course, where privatization has already occurred, measures to introduce competition remain important and should still be pursued. However, they may be more difficult to implement, as the private monopoly will have a clear interest in lobbying the government to delay/avoid measures that may jeopardize its market position.

2.1 Competitive restructuring: separating competitive and non-competitive industry segments

17. An essential basis for the creation of new possibilities for competition in many countries' infrastructure sectors has been the realization that the majority of such sectors, even if they have some monopoly elements, normally are not 'monolithic natural monopolies' (Kessides 2004; the core insights go back at least to Kahn 1988). Rather, such sectors typically comprise distinct activities some of which may have natural monopoly characteristics but others of which are perfectly capable of supporting competition.

18. Table 1 summarizes information on possibilities for competition that arise in five specific infrastructure sectors. These are, to be sure, just possibilities. The challenge for policy-makers is to decide, on the basis of the best available information, which of these possibilities for competition can be realized in the context of their respective geographic, institutional and practical constraints. This is a challenge that calls for substantial input from business users, with their practical experience and knowledge 'on the

ground', in addition to public interest organizations and advisory bodies that have specialized knowledge of the sectors concerned.

Table 1 Non-competitive and competitive components of key infrastructure industries

Industry	Activities that cannot always be operated on a fully competitive basis	Activities that can be and increasingly are operated on a competitive basis
Electricity	High-voltage transmission and local distribution	Generation and supply to final customers
Gas	High-pressure transmission and local distribution	Production, supply to final customers, and storage
Telecommunications	Local residential telephony or local loop	Long-distance, mobile, and value added services
Railways	Short-haul track and signalling infrastructure	Train operations and maintenance facilities
Air transport services	Airport facilities	Aircraft operations, maintenance facilities and commercial activities

Source: Adapted from Kessides (2004), Table 1.2.; see also Gönenç, Maher and Nicoletti (2001).

2.2 Relevant OECD recommendations

19. The OECD Committee on Competition Law and Policy and its affiliated bodies have played an important role in developing related policy approaches. In 2001, the OECD Council adopted a "Recommendation concerning Structural Separation in Regulated Industries". The recommendation recognized the potential usefulness of structural reforms, i.e. separation of potentially competitive segments of a particular sector from other segments that may constitute genuine 'natural monopolies' and 'behavioural measures' (i.e. regulation). Both can play a role in stimulating competition for the purpose of controlling costs, promoting innovation and enhancing the quality of a service to the benefit of users.

20. At the same time, the OECD recognized that neither structural reforms nor regulation were without attendant costs. Therefore, rather than recommending a 'blanket' approach to the implementation of such reforms across countries, it urged a careful 'case-by-case' approach involving the weighing of potential benefits and costs. Indeed, different countries (both developed and developing) have employed a variety of approaches at different times and across different sectors (e.g. energy as opposed to transportation or telecommunications). This is an important factor highlighting the need for progressive learning and input from business and other advisory bodies to the implementation of particular solutions in particular cases.

21. In 2006, the above-noted Recommendation underwent an extensive review (OECD 2006A). A key finding of the review was that structural separation, where practical, has important general advantages over behavioural measures, which however needed to be balanced against possible disadvantages. At the same time, the OECD study noted that "costs and benefits differ from sector to sector and from country to country, so uniform recommendations are not possible." Further work of the OECD Competition Committee resulted in a report approved in 2011 (OECD 2011A) and led to a revision in December 2011 of the 2001 Council Recommendation Concerning Structural Separation in Regulated Industries. The report reviewed the experience of structural separation ten years after the adoption of the 2001 OECD Council Recommendation Concerning Structural Separation in Regulated Industries and found that structural separation remains a relevant remedy to advance the process of market liberalisation. However, it also noted that the impact of separation policies on investment incentives has been an issue throughout the sectors. Consequently, the report again emphasized the need to assess the benefits and costs of structural separation against the benefits and costs of behavioural measures.

22. As a result of these deliberations, in 2011 the 2001 Recommendation was amended by the OECD Council to address the role that corporate incentives to invest can play in assessing the desirability of structural separation in regulated industries (OECD 2011B). This finding bears out the "holistic approach" referred to above in that it underlines the need to adopt policies in light of the circumstances of the particular market concerned, and to re-assess them regularly based on experience gained.

2.3 The importance of the continuing application of competition law, post-restructuring

23. While the foregoing describes measures arguably going beyond "what competition agencies do" (see the fourth principle above), to be sure, an important additional element of the policy response to a lack of competition in public infrastructure sectors is the adoption or maintenance and enforcement of a competition, or anti-trust, statute, on a continuing basis. Such a statute is important to deal with three main sets of business practices - cartels, anti-competitive mergers between firms and abuses of dominant position (sometimes referred to as monopolization). All of these practices have the potential to undermine or eliminate completely the potential gains from pro-competitive reforms, including structural separation. For example, suppose that train-operating companies are split off from the ownership of railroad tracks in the hope of enabling effective competition to take place, but then the train operators meet secretly to establish a rate-setting cartel. All of the potential gains for consumers generally, and export-oriented businesses in particular, may be lost.

24. However, in line with the first of the principles listed above, it is important to keep in mind that developing countries, depending on their enforcement capacity, cannot be expected to adopt the full range of potentially complex enforcement measures at the disposal of competition authorities in developed economies. Especially where general competition laws interplay with regulatory policies, careful analysis of measures to be taken and policy coordination is warranted.

2.4 The international trade dimension

25. While measures to inject competition into moribund infrastructure monopolies have most often been implemented at the national level, in many cases an interaction with international trade agreements and cooperation can also arise. For example, it has been suggested that, in Africa, the creation of common regional markets may be a necessary step to establish effective competition in some parts of the transportation sector, where there is insufficient demand to support multiple service providers in some countries (see, for related discussion, Teravantinthorn and Raballand 2009). Similarly, regional cooperation can be an important factor in facilitating competition in energy markets.

26. More generally, Article VIII of the General Agreement on Trade in Services (GATS) obliges Member governments of the World Trade Organization (WTO) to ensure that any monopoly supplier of a service in its territory does not, in the supply of the monopoly service in the relevant market, act in a manner inconsistent with that Member's obligations under Article II and specific commitments under GATS. It also obliges Members to ensure that any such supplier does not act in a manner inconsistent with the Member's commitments in the supply of a service outside the scope of its monopoly rights. Article IX of the GATS further enlarges the application of competition principles to GATS disciplines, recognizing that certain business practices of service suppliers, other than those falling under Article VIII GATS, may restrain competition and thereby restrict trade in services. It, consequently, obliges Members to enter into consultations with a view to eliminating such practices, upon request by another Member (see World Trade Organization 1997).

27. Another important example of the synergistic incorporation of competition policy approaches into international trade initiatives consists in the so-called "Reference Paper" on regulatory principles which forms part of the commitments made by 90 WTO Members in the context of the WTO Negotiations

on Basic Telecommunications Services. The Reference Paper is intended to address, inter alia, situations where public telecommunications operators that are no longer monopolies, but rather are dominant operators (or "major suppliers") either by virtue of controlling essential facilities or having the ability to influence the market. The disciplines are intended to ensure that governments apply appropriate mechanisms to avoid dominant operators posing impediments to competition and, hence, market access for service suppliers. To respond to this concern, the Reference Paper sets out detailed rules relating to interconnection of directly competing service providers with major suppliers on non-discriminatory terms; the prevention of anti-competitive acts, including anti-competitive cross-subsidization; and the making available of information needed for efficient inter-connection. These rules draw importantly on concepts of antitrust and regulatory policy such as exclusionary practices and the essential facilities doctrine (Anderson and Holmes 2002).

28. Key elements of the Reference Paper and related provisions of Mexico's GATS commitments were considered in the 2004 decision of the WTO Panel in the Mexico – Telecoms ("Telmex") case. In this case, which was brought against Mexico by the United States, the panel found that several features of Mexico's framework for regulation of international telecommunications services were in violation of Mexico's commitments under the Reference Paper (see Box 1 for a summary of points relating to the competition dimension of this matter).[4] Rather than appealing the case to the WTO Appellate Body, Mexico chose to accept the panel's ruling. In the view of some observers, it did so precisely because this was in the best interest of Mexico's consumers and the long-run development of Mexico's telecommunications sector (see, e.g., Hufbauer and Stephenson 2007; and, for useful related commentary, Fox 2006).

Box 1. Competition-related elements of the WTO Panel Report in MEXICO – TELECOMS (DS204)

Procedural aspects of the Dispute

Complainant: United States
Respondent: Mexico
Establishment of Panel 17 April 2002
Adoption of Panel Report 1 June 2004

Background

Telmex, the former monopoly operator, remained the dominant supplier of telecommunications services in Mexico after privatisation and the opening of the sector to competition. According to the WTO panel report, the applicable regulations in Mexico conferred on Telmex (as the long-distance service licensee having the greatest percentage of outgoing long-distance market share for the relevant country in the previous six months) the power to negotiate the rate to be paid by foreign carriers (including U.S. carriers such as AT&T and MCI) for the interconnection of calls terminating in Mexico. In addition, Mexican laws required all other licensed Mexican concessionaires to charge no less than the fee negotiated by Telmex for similar services.

Summary of Competition-related Findings of the Panel

The Panel ruled that Mexico violated its commitments under the Reference paper and the GATS in that:

- Mexico failed to ensure interconnection at cost-oriented rates for the cross-border supply of facilities-based basic telecom services, contrary to Article 2.2(b) of its Reference Paper;
- Mexico failed to maintain appropriate measures to prevent anti-competitive practices by firms that are a major telecom supplier, contrary to Article 1.1 of its Reference Paper; and
- Mexico failed to ensure reasonable and non-discriminatory access to and use of telecommunications networks, contrary to Article 5(a) and (b) of the GATS Annex on Telecommunications.

Source: World Trade Organization (2006); see, for related commentary, Fox (2006) and Hufbauer and Stephenson (2007).

[4] For a more complete summary also covering other aspects of the case, see http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds204_e.htm.

29. As to the systemic importance of the case, Fox (2006) concludes that

> "The Mexican telecom case illuminates why competition rules must extend cross-border and why hybrid trade-and-competition (public/private) restraints must be treated as a unified whole, if we are to realize the good potential of globalization. […] The GATS Annex with its Reference Paper is the first instrument providing a unified vision for disciplining linked public and private restraints. The Panel Report's interpretation of the antitrust obligation gives life to the discipline. A positive reading of the antitrust clause is a step forward on intertwined issues of trade and competition."

30. To conclude, this review of competition issues in public infrastructure sectors illustrates and bears out the principles posited earlier in this paper. Regulatory reform and competition law enforcement are two important tools available to developing countries in furthering the welfare of businesses and households, and ultimately in promoting economic development. Both regulatory reform measures and competition law enforcement need to be adapted to the specific situation prevailing in the market and the country in question in order to find effective solutions that can be implemented successfully. Moreover, the reforms to be adopted will, at least in some cases, need to be coordinated with international trade policies and/or across a range of government ministries.

3. The complementarity of market-opening measures and competition law enforcement in public procurement markets, and their importance for poverty reduction

31. The deterrence and, where appropriate, investigation and prosecution of bid rigging (inter-supplier collusion) in public procurement markets is rightly a major priority for competition agencies in both developed and developing jurisdictions. Moreover, much useful work has been done by international organizations such as the OECD, the ICN and UNCTAD to sensitize competition and procurement officials to the harm caused by bid rigging and to promulgate effective investigative and related tools (see, especially, OECD 2012 and 2005A). Such efforts bear a direct relationship to poverty reduction, in that efficiency and effectiveness in public procurement activities are vital to governments' efforts to promote development and address the underlying causes of poverty through investments in schools and universities; hospitals and public health facilities; and physical infrastructure. Much evidence indicates that, where present, bid rigging can raise the price paid by governments for goods and services on the order of 20-30%, eroding by a factor of about one quarter the results that can be achieved through a given outlay of public funds. In concrete terms, this means that a failure to take effective measures to counter bid rigging might limit a country to building three new hospitals to meet the burgeoning needs of its citizens rather than four, or impede efforts to modernize its airports by a similar factor.

32. Typically, in addition to vigorous enforcement efforts targeting bid rigging, the advice offered to competition agencies by international organizations and the agencies' own strategies with respect to public procurement markets also stress the usefulness of policy advocacy in this area. Three main areas can be identified for competition advocacy activities aimed at promoting competition in public procurement markets: *first*, general public education efforts aimed at building support for the institutions of a healthy market economy, including sound public contracting rules and procedures; *second*, efforts aimed at modifying or eliminating specific aspects of procurement policy and regulations that may (intentionally or inadvertently) suppress competition; and *third*, broader efforts to modify or reduce sectoral and/or cross-sectoral policies that are not specifically concerned with procurement but which affect the scope for competition in public procurement markets. The latter might include licensing or other restrictions on entry or participation in markets and cross-sectoral or 'framework' laws and policies that unnecessarily make it more difficult for firms to compete (Anderson and Kovacic 2009; Anderson, Kovacic and Müller 2011).

33. While the foregoing dual emphasis on enforcement and advocacy efforts in regard to public procurement markets is appropriate and commendable, there are reasons for considering that competition agencies might go significantly further in promoting competition through market liberalization than is typically done. Currently, a significant international effort is under way to expand possibilities for international competition in public procurement markets, through expansion of the coverage of the main international trade agreement governing this sector (the WTO plurilateral Agreement on Government Procurement, or "GPA"), and accession to the Agreement by additional countries, including important developing and transition economies (Anderson 2012). Market opening measures of this scale directly and substantially expand the scope for beneficial competition in public procurement markets.[5] They also make bid rigging more difficult, by increasing both the number and *diversity* of potential competitors in relation to specific procurements.[6] In the annals of competition agencies, there are multiple examples of cases in which unnecessary restrictions on the set of suppliers eligible to compete have facilitated collusion (Anderson and Kovacic 2009; see also Coate 1985). Yet, to date, competition agencies and advocates have had little involvement in framing/carrying forward efforts to expand the application of the WTO GPA or other market liberalization arrangements in this sector.

34. Beyond this, the efficient conduct of public procurement activities - to ensure their maximal contribution to poverty reduction - requires a careful balancing of concerns and efforts aimed at promoting competition, ensuring integrity, and specifying the attributes of the goods and services to be procured to a degree sufficient to ensure user satisfaction. While each of these is an important and valid public policy consideration, trade-offs can arise between measures aimed at pursuing each of them. For example, as is well known to competition authorities but not necessarily accepted in all relevant quarters, ill-conceived transparency measures can facilitate collusive tendering (Kovacic et al 2006; Anderson and Kovacic 2009; Anderson, Kovacic and Müller 2011). Consequently, the appropriate evolution of policies in this area requires not just general policy advocacy but mutual engagement at a deeper level by competition agencies, procurement specialists and the advocates of integrity in government, to understand each side's respective concerns and develop appropriately tailored approaches.

35. One area in which public procurement activities have particular relevance for poverty reduction and development is that of public health (WTO/WIPO/WHO 2013, and Müller and Pelletier 2013 forthcoming). Obviously, health is a major aspect of the well-being of citizens, in their capacities as both consumers and as workers. Furthermore, public spending on health represents a very substantial proportion of government spending in OECD countries (OECD 2010A and B). In this context, the possibility of achieving significant savings through competition and improvements in government procurement processes will have direct implications for both the welfare of citizens and the state of government finances - thereby also impacting on the ability to promote development and reduce poverty through other initiations involving the outlay of public funds (Transparency International 2006).

36. Scope for improvement in this area certainly exists since, according to the World Bank, the procurement of medicines has been particularly prone to weak governance, which, in turn contributes to

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5 For example, the WTO Secretariat has estimated that the conclusion of the renegotiation of the GPA in 2012-13 has created additional possibilities for competition (as a result of being covered by the Agreement) in markets valued at $80-100 billion worldwide, annually. See Anderson (2012) and references cited therein.

6 To be sure, the opening of markets to foreign competition certainly does not render collusion impossible or negate the need for vigorous competition law enforcement in this area, in that relevant inter-firm agreements can and often do extend to foreign suppliers. Nevertheless, market-opening/the elimination of measures that unnecessarily restrict the pool of potential suppliers can powerfully reinforce the application of competition law in this area, by making collusive agreements more difficult to reach and enforce (OECD 2012; Anderson and Kovacic 2009; and Anderson, Kovacic and Müller 2011).

stock-outs, wastage, poor quality, and cost inflation (World Bank 2011). In a similar vein, a medicine pricing study which is cited in the 2010 World Health Report found that, in Africa, European and Western Pacific Regions, governments paid an unnecessary surcharge of, in average, 34-44% for medicines (see Cameron et al.2009, cited in WHO 2010). Moreover, in many cases, the failures of procurement systems to deliver good results relate specifically to a lack of effective competition, whether due to unnecessarily restrictive approaches to bidder selection and screening or to explicit collusion among suppliers (see Box 2). Such deficiencies in public procurement practices should be acknowledged as a significant failure of public health systems, and of governments' efforts to improve the welfare of citizens.

Box 2. Examples of bid rigging in health care procurement markets in South Africa, Turkey and Romania

"In the **South African** case of The Competition Commission vs Adcock Ingram Critical Care (AICC) and four others, it was established that five pharmaceutical companies had, over a period of at least fourteen years, colluded in rigging bids for the supply of intravenous solutions to public hospitals, a tender initially issued annually and later every two years. Prices were fixed, markets worth many hundreds of millions of [South African] Rands were allocated and winners and losers were determined, as was the compensation, often in the form of a post-award sub-contract, for the losers. In a statement submitted to the hearing at which the Tribunal approved the consent decree, a representative of the national Department of Health succinctly summed up the character of bid rigging and the nature of the problems that it posed:

> 'The Department of Health purchases large volume parenterals and administration sets through the public tender system in order to secure affordable prices, which ultimately benefit the many people who use the public health system, and as has been stated, the majority of whom are poor. The advantages for the suppliers are a guaranteed market, economies of scale and a binding contract....
>
> We are committed to giving preference to local manufacturers to promote job creation, poverty eradication and skills development. However, it is difficult to pursue these objectives of promoting local manufacture when such manufacturers act in such a manner. We find it very disturbing that SMMEs that get preferential points in the tender system to enable them to gain market share, resort to this kind of behaviour...
>
> These findings beg the question of whether this is the only case of collusion in the industry and there is a high possibility that this is not the only case of collusion in the industry. The challenge that we face is: how does one prevent such collusive practices in the future? Tender systems, by their very nature, are at risk of collusion, especially in the pharmaceutical sector where there are usually only a handful of competitors that are known to one another.'"

A submission by **Turkey** to the OECD roundtable on collusion and corruption in public procurement "reveals that in 2009 most of the bid rigging investigations carried out by the [Turkish Competition Authority] TCA were in the health sector, including medicines, laboratory supplies and medical equipment. This appears to have included the prosecution of several cases of collusive boycotts of tenders issued by procurement authorities in the health sector. As with the South African public health official cited here, the Turkish submission ascribes the frequency of bid rigging in health markets to the oligopolistic structure of the suppliers' markets. In 237 out of 310 tenders issued in Turkey for laboratory equipment, fewer than 3 suppliers responded to the tenders."

A submission by **Romania** to the same roundtable also "identifies the health sector as the sector most vulnerable to bid-rigging practices. Thus, in 2008, the [Romanian Competition Council] RCC imposed fines totalling approximately Euro 22.6 million on four pharmaceutical companies for sharing the publicly funded section of the insulin market in the context of a national tender organised in 2003 by the Ministry of Health. The collusive practice in this case aimed at sharing the diabetes product portfolio of a drug manufacturer between 3 distributors.

In another important case, 3 distributors who rigged a bid in response to a national tender issued by the Ministry of Health for the supply of dialysis products and equipment were fined Euro1.5 million.

The Romanian submission raises many other examples of dubious tendering and bidding practices in various markets for health products. Many of these appear to relate to the preparation of exclusionary tender specifications."

Source: OECD 2010C

37. At the same time, for most countries, international trade is part and parcel of their health procurement. As a recent publication by WTO Director-General Pascal Lamy (2012) states "for most countries, self-sufficiency is not an option when it comes to medical supplies and equipment".

38. Expanding on this point, the liberalization of public health procurement markets through unilateral action or via negotiations under the GPA or other international instruments can significantly strengthen competition and improve the delivery of medicines and related services. By way of example, with an import penetration approximating 47% in the European Union, the sector of medical instruments is one of the most traded in government procurement in the EU. As a result, the internal EU trade of medical instruments, apparatus, implants and supplies was estimated at around 40 billion euros in 2010. Imports from outside the EU approximated 28 billion euros for the same type of supplies (Source: Eurostat 2011, see also Kommerskollegium 2011). The elimination of barriers to competition, including to international competition, in the health sector clearly has the potential to improve the competitive nature and efficiency of the public health procurement market, as well as the access to a broader range of medical technology by allowing more suppliers to bid on public health procurement contracts.

39. The foregoing is corroborated by a recent study by the Swedish National Board of Trade, which provides an example of how important transnational economic activity can be to public health care services. The study finds that open borders appear as important for quality and efficiency of the health care sector as for any other field in the economy. Borders that are open to competition in government procurement spur competition in markets where few firms are active, improve the quality of health care, and help authorities ensure that taxpayers' money is spent in the most efficient way (Kommerskollegium 2011). The need for international competition in respect of procurement in the public health sector is likely to be even more acute in a developing country context, where the availability of medicines internally is limited.

40. Overall, reducing corruption and achieving enhanced efficiency through competition in public health procurement markets holds the potential to contribute very importantly to the maximization of value for money in the health sector. This, in turn, can contribute to poverty reduction both by reducing the costs of health care to individual citizens and improving their productivity as workers. Addressing the concerns enumerated in this section relating to competition and market governance will be essential to this result. While, to a large extent, success in this area is a matter of reforming procurement policies in addition to the straightforward application of competition law and policy, competition agencies can contribute to both aspects through their enforcement and advocacy functions - a prominent example of the "holistic approach" to competition policy and poverty reduction outlined in this paper.

4. Further dimensions of the role of competition policy in achieving public health objectives, as an element of poverty reduction

41. Enlarging the discussion further, competition policy has important related roles to play both in fostering innovation in the pharmaceutical sector and in ensuring access to medical technology (WTO/WIPO/WHO 2013, and Müller and Pelletier (forthcoming)). As is discussed below, one facet of this discussion concerns the role of competition policy in providing checks and balances to intellectual property (IP) rights and preventing abuses of such rights. However, this is only one aspect of the discussion, and not necessarily the most important in the context of developing economies. Rather, competition policy has a broader role to play in two distinct but interconnected ways: first, competition law and its enforcement addresses and helps correct anti-competitive behaviour that may occur; and second, competition policy can enlighten policy choices in sectors relevant to public health. Both functions of competition policy complement each other in that they are aimed at ensuring that markets work to the benefit of the consumer - or, in the health context, the patient.

4.1 Competition law enforcement as a core function

42. The role of competition law enforcement in ensuring innovation and access to medical technology lies in preventing anti-competitive practices that can, e.g., restrict research and development, limit the availability of resources needed for the production of medical technology, create unnecessary barriers to entry of generic or inter-brand competition, and restrict available distribution channels and consumer choices generally.

43. Practices that have been identified as potentially detrimental to public health include (but are not necessarily limited to):

- Preventing generic competition though anti-competitive patent settlement agreements, and/or the creation of "patent thickets";
- Mergers between pharmaceutical companies that lead to undesirable concentration of research and development and/or IP rights;
- Cartel agreements between pharmaceutical companies, including between manufacturers of generics;
- Anti-competitive behaviour in the medical retail and other related sectors; and
- Bid rigging in public procurement (see section 0above).[7]

44. A further specific practice which is of considerable interest to health policy advocates with reference to the application of competition law is that of refusals to licence (see WTO/WIPO/WHO 2013). It is recognized, however, that the treatment of this practice is not without controversy and that, in some jurisdictions, the right to refuse access is considered to be implicit in the grant of the relevant intellectual property rights. In any case, no particular approach to this practice is advocated here: rather, our point is that the role of competition policy in public health markets is much broader than this.

4.2 Competition advocacy in the health care sector

45. Over and above the role of competition law enforcement in this sector, competition *policy* can inform regulatory and other policy choices in regard to public health markets in diverse ways. Examples of policies relevant to innovation and access to medical technology that ideally take competition policy aspects into account include, e.g., regulatory choices made and policies pursued in designing IP protection, drug approval mechanisms, the framework for public procurement of medical technology, and regulations regarding health sector related businesses and professions.

46. In that vein, competition bodies can and, in some jurisdictions, have been given the mandate to undertake broad policy reviews of competition and regulation, pharmaceutical price regulation regimes, pharmacy regulation, and wholesale/distribution arrangements. They can make policy recommendations for a range of policies affecting competition – not only the operation of the competition and consumer protection laws, but also in areas directly affecting public health. Institutions such as the OECD and the World Bank have published studies on the interplay between competition policy and health regulation, thereby promoting and encouraging coordination between competition authorities and those agencies that regulate prices of medical products and the health sector more generally.[8]

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[7] For a more in-depth discussion, see Müller and Pelletier (forthcoming).

[8] See OECD (2009A); OECD (2009B); OECD (2006B); OECD (2005B); OECD (2004); OECD (2000); and more generally OECD (1998B). See also World Bank (2009) and World Bank (2005).

47. The role of competition policy in this context is to promote market structures and regulations that provide for a competitive environment. As pointed out above, competitive market structures can be expected to result in price reductions and efficiency gains and thereby enhance public welfare. Nonetheless, it is important to recognize that competition, while an important factor, may not, by itself, be fully conducive to achieving all relevant policy goals, such as ensuring the safety of medical technology and quality of health care services and providing incentives for innovation, which are equally at the heart of achieving innovation and access to medical technology. Therefore, different policy goals and the different instruments available to achieve those goals need to be taken into account and carefully balanced. Such issues can only be successfully resolved through dialogue emphasizing the achievement of appropriately balanced health policy choices (see Box 3).

Box 3. The relationship between competition law and regulation regarding public health

"In some countries, competition bodies have a mandate to undertake broad policy reviews of competition and regulation and a number have carried out reviews of pharmaceutical markets, pharmaceutical price regulation regimes, pharmacy regulation, and wholesale/distribution arrangements. UK, Australian and Irish competition bodies and the OECD have carried out research and market studies that compare prices internationally, analyze the extent of competition in pharmaceuticals markets at all levels, identify barriers to entry, identify abuse of dominance, and study the effects of regulation on competition. They make policy recommendations for a range of policies affecting competition – not only the operation of the competition and consumer protection laws.

Many countries have separate economic regulation agencies that regulate prices and other aspects of market behaviour for industries with natural monopoly characteristics or other special features. This is one of the rationales for creating specialist pharmaceutical price regulatory agencies - to ensure that the market power created by patent protection for pharmaceuticals is not abused. Alternatively, specific sectoral ministries carry out this function. There is an obvious interface between the objectives and scope of the competition law and the role of competition authorities on the one hand, and sector-specific price and market regulation on the other. There is a range of legal and institutional practice for how countries coordinate and harmonize competition law and other price and market regulation. It is generally regarded as good practice (by institutions such as the World Bank and the OECD) to have formal provisions for coordination, if not joint jurisdiction, between the competition authority and the agencies responsible for sector-specific price regulation."

Source: Hawkins (2011).

48. These two distinct functions of competition law and policy, the creation of competitive market structures through informed regulation on the one hand, and competition law enforcement on the other, complement each other. Indeed, a competitive environment created by sound policy choices will make it difficult to engage in anti-competitive behaviour while anti-competitive behaviour will be facilitated by policies resulting in closed market structures. The goal of fostering innovation and ensuring access to medical technology will be best achieved when both aspects are taken into account: Regulations relevant to the health sector should take competition policy objectives into account where possible. However, where other policy objectives require the adoption of regulations that may have the effect of limiting competition to some extent due to overriding concerns, competition law enforcement can be used to counter-act anti-competitive practices that may be facilitated by such regulations.

49. In that regard, it is important to note that, in order to best ensure access to medical technology, competition policy and law need to be applied to businesses and actors throughout the entire supply chain delivering medical technology to patients. This is because efficiency gains through competition at one level can be annulled by restrictions to competition elsewhere in that chain. A recent study conducted by the World Health Organization (WHO) found that in most countries, high medicine prices are a consequence not only of high prices charged by manufacturers, but also of high add-ons in the supply chain, such as

wholesale and retail margins and government-imposed duties and taxes (Cameron et al. 2011). Both of these factors, acting either singly or in combination can substantially increase the final price of medical technology to patients. Furthermore, where patients are supplied with medical technology by publicly funded organizations and bodies, it is, e.g., of crucial importance to ensure competitive bidding processes in public procurement of such technology. Taking competition policy into account in the entire supply chain can therefore be expected to have a substantial effect in making medicines more affordable to citizens.

5. Addressing monopsonistic practices in international supply chains that (potentially) impact adversely on developing country exporters

50. Participation in international trade holds the promise of significant revenue enhancement for developing country businesses since often, the prices for goods and services that can be obtained in developed country markets are higher than those in developing country's domestic markets. Moreover, for most products and services to be exported, international marketing, retail and distribution channels are increasingly complex. Very often, small and medium sized businesses in developing countries must therefore market their products through international distribution and retailing conglomerates. This can have major advantages in terms of brand recognition, economies of scale and scope. However, the gains from participation in international trade that are actually reaped by developing country business owners, and the effects on further development of successful businesses in developing countries, depend at least partly on whether or not rents are distributed equitably between international conglomerates and developing country businesses.

51. Further to the above, the reliance of developing country suppliers on large retail and distribution conglomerates can expose these (often smaller) businesses to very significant bargaining power and the potential for anti-competitive practices on the part of the conglomerates, resulting in an inequitable distribution of rents. In competition law terms, monopsony power needs to be addressed.

52. This section of the paper considers both aspects of the issue -- the advantages that are often derived from marketing through international distribution channels and the potential related concerns regarding anti-competitive practices that can arise. As the agro-food sector is a prime example of an internationally interlinked market in which the above considerations are of relevance, that sector will be used to elaborate related issues.

5.1 Global Value Chains and Competition: the Agro-food sector

53. Agricultural commodities represent a critical share of many developing countries' exports.[9] Furthermore, recent price increases in international commodity markets would suggest that participation in international agricultural commodity trade by developing countries is becoming increasingly attractive to producers in such countries. However, there is evidence that a price increase in international markets and/or developed countries does not necessarily translate into higher "farmgate" prices for producers. A recent study by the FAO therefore asks the question: "Why were high food prices not an opportunity for poor farmers?"[10]

54. Raw commodities are inputs into a vertical commodity chain that extends from the production of the raw commodity, via processing to retail and distribution. Often, raw commodities only provide for

[9] The FAO reports that agricultural exports represent up to 90.57% of total exports of some economies, e.g. 90.57 % for Djibouti, 89.21 % for Burundi, 89.09 % for Liberia, 85.72 % for Malawi and 83.34 % for Timor-Leste. See http://faostat.fao.org/site/342/default.aspx.

[10] FAO (2009), Part 2.

small shares of the total value or price of the finished product, even where the commodity involved does not require much processing. McCorriston and Sheldon (2007) observe that exporters of coffee, for example, have faced a significant decline in real prices over the years, while global buyers, roasters and retailers have seen their profits increase. Furthermore, in the banana sector, plantations only receive 10% of the final price of the product, whereas international trading companies and retailers each add 30-40% to the final price (McCorriston and Sheldon 2007). This can be seen as an indication that high profit margins are reaped by "downstream" firms, i.e. firms at more advanced stages of the commodity chain, while both developing country producers and consumers are "worse off". These authors therefore suggest that even though trade liberalization in agricultural commodities may have been seen as having the potential to act as a powerful catalyst for poverty reduction, it will not bring about the desired results if the market structures are such that the downstream distribution and retail capture the largest share of total value added.

55. Of particular relevance to small producers of agricultural commodities in developing countries are private contracting strategies resulting in enhanced vertical co-operation between small producers and big buyers of their agricultural products. Such programmes often "tie" producers to one of the few processing, retail and/or distribution conglomerates, thereby increasing the conglomerates' bargaining power. However, they often offer supplier support measures as "part of the package" in return: credit, inputs (such as seeds, fertilizer, etc.), prompt payments, transportation and quality control are the most commonly offered forms of support (Swinnen and Maertens 2007). Other forms of supplier support, depending on the relevant sectors, include transfer of new technologies, veterinary services, etc. An example of such a supplier support programme is set out in Box 4 below.

Box 4. "French" beans from Madagascar

In Madagascar, vertical co-operation between a local food processing business consortium Lecofruit and rural farmers has helped in establishing Madagascar as exporter of high quality "French" beans to Europe.

Lecofruit buys vegetables from more than 9000 small farmers based on contracts. It distributes seeds fertilizer and pesticides as part of the contract. The value of those inputs is later paid back in kind by farmers upon harvest and therefore pre-financed by Lecofruit. Furthermore Lecofruit teaches farmers how to make compost with a beneficial spill-over effects to other crops. In order to ensure compliance with contracts by farmers the company has put in place a hierarchical system of monitoring with lower levels of monitoring carried out by people living in rural villages themselves.

The co-operation contracts are perceived as useful by farmers as they help reducing periods without income caused by seasonality of crops. Further reasons for farmers to sign contracts were the receipt of inputs on credit and the learning of new technologies. However a higher income was mentioned by a relatively low number of contractors and almost half the farmers were willing to stick to the contract even if prices offered were half of the price observed on the local market. A consequence is that there is little potential for farmers to negotiate prices with Lecofruit.

Source: Minten, Randrianarison and Swinnen (2006)

56. It should be acknowledged that such programmes can have positive effects for developing country farmers and businesses where they raise efficiency, lower production and marketing costs, or otherwise increase profitability of participating farms. Furthermore, they shift risk away from farmers by providing for guaranteed sales at guaranteed prices and secured access to capital. From a long-term development perspective, technology transfer and learning effect can create long-lasting spill-over effects, including with respect to other crops. Therefore, the potential for efficiency gains from such vertical co-operation should not be overlooked, and simplistic solutions that limit the scope for vertical cooperation in an "across the board" manner are likely to bear significant costs.

57. Does this mean, however, that concerns regarding monopsony power and competition can be disregarded entirely? A key question, in this regard, is who benefits from the efficiency increase described above, and to what extent. In that regard, evidence shows that small developing country producers benefit most from supplier support if competition between different larger firms targeting the same suppliers occurs, i.e. if their dependence on a particular buyer is decreased. Competition between such firms leads to both more extensive support, i.e. better services provided by the buyer, and a more equal rent sharing, i.e. a higher price for the agricultural commodities produced.

58. A further trend that has been observed in the agro-food sector is (horizontal) concentration or consolidation at all stages of the value chain. This means that different companies at the same stage of the value chain, e.g. processing, retail, or distribution companies have merged and/or formed consolidated economic entities. Depending on the market structure, and in particular on the number of competitors remaining in the market, mergers therefore have the potential to significantly lessen competition. At the same time, if consolidation occurs in a downstream sector, it enhances the potential for monopsony power being exerted *vis-à-vis* upstream sellers. If this is the case at the national level, competition agencies generally exert their merger control functions and powers and either prevent mergers or limit the impact of mergers on competition by making it subject to conditions. Reflecting, in part, concerns of this nature, mergers in the agro-food sector have recently attracted the attention of competition authorities in major developed economies (see, e.g. UK Competition Commission 2011A and US Department of Justice 2009).

59. Further to the above, a pertinent development is that competition agencies in some developing/emerging countries have actively monitored consolidation and resulting anti-competitive practices between national companies in the sector. The example of the South African Competition Commission is described in Box 5.

Box 5. Market power and merger review in the agri-food sector: the case of South Africa

The South African Competition Commission describes its merger review in regard to the agriculture and agro-processing sector as follows:

"[D]eregulation, with the closing of the marketing boards (the former control boards) coupled with the conversion of most of the cooperatives into private and listed companies, has underpinned high levels of merger activity. Many of the firms that held dominant positions in the regulated market have, over the past decade, extended their control over the vertical and horizontal channels through which they produce and market.

For example, the former Ost-Transvaal Ko-operasie (OTK) has become Afgri Operations. Afgri Operations has extended horizontally through acquiring other former cooperatives together with their fixed infrastructure such as grain silos. Afgri Operations has also extended its range of services offered to farmers on the input side as well as on the output side as a buyer, trader and processor of agricultural products.

In the poultry industry, Astral's acquisition of National Chicks in 2001 (approved with conditions) and Earlybird Farms 2004 increased Astral's total broiler production to just below that of Rainbow Chickens. Rainbow Chickens expanded its operations through the acquisition of Vector Logistics in 2004, which resulted in the firm becoming even more vertically integrated in the poultry supply chain.

The merger between Afgri Operations and Daybreak Farms, approved in 2006, resulted in the creation of another vertically integrated player in the poultry industry, by merging a feed manufacturer with a producer of broilers.

An example of a prohibited merger in the food sector is the proposed Tongaat-Hulett Group/Transvaal Suiker Beperk merger in 2000. This was a large horizontal proposed merger that was prohibited by the Tribunal in a food market that is highly concentrated. The merger would have resulted in the acquisition of the third largest sugar producer (Transvaal Suiker Beperk, controlled by Rembrandt) by the Tongaat-Hulett Group, a subsidiary of the Anglo American Corporation."

Source: Competition Commission of South Africa 2009.

60. Wilcox and Abott (2004), in a study regarding cocoa markets in West Africa, found that the econometric results strongly suggest that there is exercise of market power along the cocoa supply chain in Ivory Coast, with rents in the range of 35% being extracted by the government and multinational exporters taken together. Box 6 below sets out anti-competitive behaviour in agro-food chains that has been dealt with by the South African Competition Commission.

Box 6. Cases of anti-competitive practices in agro-food chains in South Africa

The South African Competition Commission prioritizes its work, with a focus, among others, on food and agro-processing.

One of the Commission's first cases contained complex issues of alleged vertical and exclusionary restraints by South African Dried Fruit Holdings Ltd (SAD). Exclusive supply arrangements effectively foreclosed the market to new entrants, such as South African Raisins, the complainant in this case.

Similarly, in 2000, an Eastern Cape citrus farmer brought an interim relief application against citrus packing and distribution company, Patensie Sitrus, claiming that certain provisions of the company's articles of association contravened the Competition Act. They locked farmers, who were shareholders in the company, into an exclusive supply arrangement with Patensie Sitrus, thus excluding potential competitors from the market for packing and distributing citrus fruit in the Gamtoos River Valley.

In 2005, the Commission investigated a complaint against a major tea supplier that had entered into exclusive supply arrangements with the major local packers of rooibos tea. According to the finding of the Commission, these supply agreements foreclosed rivals and new entrants from supplying processed rooibos to domestic packers, amounting to the foreclosure of 91 percent of the processing of raw and bulk-supplied rooibos to the domestic market.

Source: Competition Commission of South Africa 2009.

5.2 Policy and other responses to trends in the agro-food sector in developed jurisdictions

61. In developed countries, competition authorities have recently undertaken important initiatives to deepen their understanding of the effects of concentration in the agro-food sector on both consumer welfare and producers' businesses, thereby also helping to ensure a sound basis for competition law enforcement. An example for such an initiative is set out below in Box 7.

Box 7. UK Enquiry into groceries retailing.

In the UK, the Competition Commission carried out an enquiry into UK groceries retailing which finished in 2008 and concluded that measures were needed to address its concerns about relationships between retailers and their suppliers. As a result the Groceries Supply Code of Practice (GSCOP) came into force on February 2010 and replaced the former Supermarkets Code of Practice (SCOP). The aim is to ensure that suppliers do not have costs imposed on them unexpectedly or unfairly by retailers.

The GSCOP ensures that:

- the provisions of the GSCOP are included in every contract between grocery retailers and their suppliers;
- all retailers with groceries turnover in excess of £1 billion per year are included within its scope;
- an overarching fair dealing provision is included;
- retailers are prohibited from making retrospective adjustments to terms and conditions of supply;
- retailers are prohibited from entering into arrangements with suppliers that result in suppliers being held liable for losses due to shrinkage;
- retailers are required to enter into binding arbitration to resolve any dispute with a supplier; and
- retailers are required to keep written records of all agreements with suppliers on terms and conditions of supply.

It also establishes an Ombudsman to arbitrate on disputes between grocery retailers and suppliers and investigate complaints under the new Groceries Supply Code of Practice (GSCOP)

Source : United Kingdom Competition Commission, Press Release (2011B) and sources referenced therein.

62. Additionally, the EU Commission has published a Report on competition law enforcement and market monitoring activities by European competition authorities in the food sector providing a comprehensive overview of the most significant enforcement, advocacy and monitoring actions undertaken by the national competition authorities and the Commission from 2004 to 2011 (EU Commission 2012). The report finds that in total, European competition authorities have undertaken more than 180 antitrust investigations, close to 1300 merger control proceedings and more than 100 market monitoring actions since 2004 concerning that sector.

63. In the US, the Department of Justice and the Department of Agriculture held a series of joint workshops on competition issues in the agro-food sector in 2010.[11] This led to the publication by the Department of Justice, in 2012, of a report summarizing the outcomes of the workshops. The report states that "antitrust enforcement has a crucial role to play in fostering a healthy and competitive agriculture sector", but also points out that some "issues may require public or private solutions beyond the antitrust laws". In that regard, the Department of Justice could "assist other public/private entities in finding solutions that maintain or enhance competition and do not, indirectly, retard such" through competition advocacy (United States Department of Justice 2012A).

64. To summarize this aspect of the discussion, no suggestion is made regarding specific enforcement actions to be taken. Rather, the point being made is simply that issues in this sector, with particular reference to international distribution chains, need to be looked into from the standpoint of developing country producers and exporters in addition to the world's consumers. Any solutions that are, eventually, adopted should take all due account of the benefits that integrated distribution systems often provide in addition to concerns related to their possible anti-competitive effects.

[11] See http://www.justice.gov/atr/public/workshops/ag2010/index.html.

6. International cartels: a continuing impediment to development and poverty reduction

65. The pernicious effects of international cartels on the welfare of citizens - including, very much, in poorer countries - have been extensively documented and discussed in the Global Forum and other international bodies, and there is no need to detail this work here (see, for relevant contributions, Levenstein and Suslow 2008; OECD 2005A; Qaqaya and Lipimile 2008; and extensive material developed by the ICN). As a result, there is now wide recognition that measures to address international cartels have an important role to play in protecting developing country consumers and promoting the ability of developing country exporters to take part in and benefit from international trade. Nonetheless, despite a very impressive record of successful prosecutions of international cartels in large developed jurisdictions over the past decade and even earlier, the impact of such arrangements on developing economies, their consumers, and on export-oriented businesses located in such economies, arguably still is not being adequately addressed and deterred. It should, consequently, be an important continuing focus of future work on competition policy and poverty reduction.

66. The issue of international cartels has an important interface with international trade liberalization. Over the past several decades, most countries, including developing countries, have extensively liberalized their trade regimes and have, thereby, opened up their markets to foreign trade. This market liberalization has occurred with the expectation of increasing welfare in multiple ways. Two among these are surely the following: firstly, consumers and users of imported products expect to benefit from lower prices and enhanced quality and product diversity resulting from increased international competition. Secondly, export-oriented businesses expect to take advantage of increased sales in new export markets.

67. International cartels directly undermine both these positive effects of trade liberalization in countries that import products exported/sold by cartel members. First of all, participants in international cartels seek to extract rents through fixing higher-than-competitive market prices. Very often, this substantially raises the prices that developing country businesses pay for the inputs they need to produce and market their goods and services. Secondly, in order to achieve this, cartels often seek to prevent competition from new entrants to the relevant market(s), including entrants from developing countries. Indeed, trade liberalization makes it necessary for cartels to shield their prices against erosion by imports from international competitors.

68. These adverse effects of international cartels have been confirmed in research taking into consideration a broad range of sectors, over extended periods (see, e.g. Levenstein and Suslow 2011, Connor and Helmers 2006). From Levenstein and Suslow's analysis of 81 international cartels convicted of price-fixing or other forms of collusion in the United States or the European Union since 1990, it emerges that most international cartels involve intermediate manufactured goods and services, with a strong presence of cartels in the chemical sector, especially food additives. Other cartels focus on sectors relevant to industrial manufacturing inputs, such as steel, carbon and graphite products, plastics and paper. Remarkably, final consumer goods are seldom the focus of these collusive arrangements, despite the fact that in many countries competition policy has been driven by a perceived need to protect consumers, rather than businesses. Rather, the majority of the sectors identified in the analysis constitute inputs to production by developing country businesses. It is apparent, therefore, that the operation of such cartels has the effect of raising directly the costs of developing country exporters, undermining their competitiveness and ability to participate effectively in both export and home markets.

69. As to the resulting overcharges paid by developing country importers, Connor and Helmers (2006) found that median overcharge rates for globally operating cartels were 29% of sales between 1990 and 2005. In other words, these cartels raised the prices paid by developing country businesses for the relevant products by 29% on average. Again, they found that the vast majority of cartels (30 out of the 34 analysed) dealt with industrial intermediate goods. Most alarmingly, there is evidence that international

cartels are more harmful than domestic cartels, as they achieve higher overcharges. Connor and Bolotova (2005) found that international cartels, on average, overcharge by 14.35 percentage points more than domestic cartels. Furthermore, cartels are more likely to engage in cross-border anti-competitive behaviour and reap higher profits when targeting jurisdictions with weak anti-cartel enforcement (Anderson and Jenny 2005; Connor 2004). Therefore, businesses in developing countries with no domestic competition law, or weak enforcement, are "prime targets" for trans-national anti-competitive practices.

70. Once a cartel is formed, outside competition needs to be excluded from markets in order to avoid competitors selling below the cartel price. On the one hand this means that existing producers need to be prevented from expanding their production; on the other, new entry into the industry needs to be prevented. Cartels can use a variety of measures to achieve these harmful results. These may include buying up competitor firms (reducing competition through consolidation), driving competitors out of the market, or weakening the economic viability of their businesses, by temporarily engaging in 'price wars', i.e. lowering prices to a level that does not let non-cartel members compete, raising the price of inputs or refusing to supply them, or the misuse of legal frameworks or government intervention mechanisms. Often these measures impact directly on the ability of developing country businesses to enter new markets, or compete effectively once they have entered.

71. To be sure, major efforts have been made to detect the presence of, investigate and prosecute international cartels in leading competition law jurisdictions. Moreover, these efforts have achieved impressive results in terms of successful prosecutions and penalties levied. However, even though many developing countries also prohibit international cartels, participating firms have been found to sell their products there extensively. Prosecutions and civil litigation in such countries have been relatively rare, and the penalties imposed very limited (Levenstein and Suslow 2008 and 2004).

72. As with other types of anti-competitive practices, enforcement measures by developed country competition authorities against international cartels can also have beneficial spill-over effects in developing countries (see, for detailed analysis, Schmidt 2006), and no doubt this has been the case at least to an extent. There are, however, a number of reasons why this is insufficient to protect the interests of developing country producers in regard to the operations of international cartels. First and foremost, national competition laws today generally cover international cartels if and only to the extent that they have anti-competitive effects within the country exercising jurisdiction (see, for a discussion of United States law and jurisprudence, Haas 2003 and Schmidt 2006). This means that developing countries cannot rely on developed country anti-cartel enforcement efforts if the cartel does not also harm consumers in the developed country economy.

73. Second, even where the risk exists of being prosecuted in developed jurisdictions, it may not create a deterrent strong enough to discourage international cartels from engaging in anti-competitive behaviour in developing country markets. This is because fines and other sanctions imposed on cartel participants on the basis of national enforcement action are often lower than necessary. Connor (2007) finds, in this regard, that, since international cartels can extract overcharges worldwide, even the theoretical maximum United States legal sanctions of eight times the United States overcharges is insufficient to deter global cartels, though they are quite capable of deterring purely domestic cartels. As a consequence, clearly, developed country measures against international cartels by themselves do not suffice to protect developing country consumers (including business users). In order to complement fines imposed by developed country governments, it is important that developing countries take an active role in the prosecution of international cartels that harm them.

74. The second and third reports on the implementation of the above-mentioned OECD recommendations observed that since 1998, international cooperation in discovering, investigating, and prosecuting cartels has reached unprecedented levels. New investigative strategies have been used

successfully, such as coordinated, simultaneous surprise inspections in several jurisdictions. Confidentiality waivers in cases of simultaneous leniency applications have created more opportunities for multi-jurisdictional cooperation. More countries than ever cooperate by exchanging know-how and expertise in cartel enforcement, in particular in the field of investigative techniques. The number of bilateral cooperation agreements has substantially increased (OECD 2005A).

75. However, despite the impressive progress made, significant limitations persist. For example, a lack of coordination of national leniency programmes, i.e. programmes designed to encourage individual cartel members to "defect" and report the cartel to the authorities in exchange for impunity or reduced fines, limits the ability of competition authorities to pass on confidential information to their counterparts in other jurisdictions, particularly in the absence of formal cooperation mechanisms (OECD 2002 and OECD 2005A). More generally, while strong cooperation mechanisms may exist between countries already having strong enforcement structures[12], this is much less true in the case of developing country competition authorities, which may need assistance but are unable to offer information or investigative capacity in return (Jenny 2002, Lee 2005).

76. Yet another problem that may need to be addressed concerns the jurisdictional gaps which, according to Jenny and Mehta (2012), facilitate the operation of export-only cartels. While not all authorities have agreed, it is arguable that such arrangements constitute a "beggar-thy-neighbor" trade policy. A question to ponder is whether further international discussions at a multilateral level could open a path to enhanced common understanding and consensus on the substantive issues involved.

7. Concluding remarks

77. Current thinking on development stresses the centrality of market governance mechanisms (laws and institutions) to the promotion of economic development and poverty reduction. This paper has argued that competition law and policy occupy a central position within the matrix of required mechanisms. From the standpoint of consumers (including, significantly, business users), competition law enforcement provides an essential deterrent to cartels and other practices that restrict output, raise prices and thereby erode purchasing power and diminish the welfare of citizens. This is no less important in poor countries than in richer ones. In fact, as elaborated in Part I, there are reasons for believing that less developed economies are more, rather than less, vulnerable to anticompetitive practices than developed economies.

78. Fortunately, in the past decade, important progress has been made in the building of enforcement capacities to address these practices, even in poorer countries. For this progress, much credit is due first and foremost to the relevant national authorities but also, very much, to civil society, international organizations and other policy advocates active in this area. These efforts to strengthen competition law enforcement capacities merit continued and intensified support from the international community, as a tool of poverty reduction.

79. The paper has also argued that - as important as the above-emphasized gains have been - further poverty reduction and welfare gains can be achieved through competition policy applications that go beyond the routine application of national competition laws. Examples considered in the paper include: (i) the pro-competitive restructuring of national infrastructure sectors to reduce costs for export-oriented producers; (ii) coordinated enforcement and advocacy efforts in relation to government procurement markets, which can both expand possibilities for competition and make bid rigging more difficult; (iii) other applications of competition policy in the health care sector; (iv) expanded efforts to identify and,

[12] See e.g. the report on co-operation between the United States and the European Union and other international co-operation efforts by the United States Department of Justice contained in United States Department of Justice 2012B.

where relevant, to address possible monopsonistic and other anti-competitive practices in global supply chains; and (v) possible additional measures by the global community to address the enduring problem of international cartels and their deleterious effects (all the while applauding the important progress that has already been made by national authorities and the international community in addressing this issue).

80. The suggestions have also been made that the pursuit of these efforts may eventually require both: (i) expanded engagement and even joint action by competition authorities with other arms of government whose mandates impact on competition (including not only regulatory authorities but also trade ministries); and (ii) new forms of international co-operation. Other possible attributes of such a "holistic approach" to competition policy would encompass: (a) expanded educational and advocacy activities relating to competition policy reforms, in particular, the nurturing of "learning institutions" that track and advocate appropriate action in specific national contexts; (b) explicit addressing of the needs of the citizens of poorer societies in their capacities as producers in addition to final consumers; and (c) use of the full spectrum of measures that governments can employ to enhance competition and improve the performance of markets. This could include, where appropriate, structural reforms that are implemented through the passage of legislation and/or appropriate international rules and initiatives, for example to facilitate collective action and address jurisdictional gaps that are perceived by some observers.

81. The authors recognize that elements of these ideas are already being taken up by the national and international competition communities in particular respects, and that further embracing of them would require careful consideration by the relevant authorities. No precipitous action is urged in this respect. Arguably, though, such a broader agenda is necessary to fulfil the promise of competition policy as a tool of poverty reduction. As a first step, consideration could be given to the potential contribution of renewed dialogue in international fora that bring together both competition agency representatives and the representatives of other relevant government ministries. Certainly, such fora are not a substitute for direct co-operation and communication between the competition agencies of different jurisdictions; they may, however, be an important complement.

BIBLIOGRAPHY

Anderson, Robert D. (2012). "The conclusion of the renegotiation of the WTO Agreement on Government Procurement: what it means for the Agreement and for the world economy," 21 *Public Procurement Law Review* 3, pp. 83-94.

Anderson, Robert D. and Alberto Heimler (2007). "What has competition done for Europe? An interdisciplinary answer," *Aussenwirtschaft* (the Swiss Review of International Economic Relations), December, pp. 419-454.

Anderson, Robert D. and Peter Holmes (2002) "Competition Policy and the Future of the Multilateral Trading System," 5 *Journal of International Economic Law*, 531–563.

Anderson, Robert D. and Frédéric Jenny (2005). "Competition Policy, Economic Development and the Role of a Possible Multilateral Framework on Competition Policy: Insights from the WTO Working Group on Trade and Competition Policy," in Erlinda Medalla, ed., *Competition Policy in East Asia* (Routledge) chapter 4.

Anderson, Robert D. and S. Dev. Khosla (1995). *Competition Policy as a Dimension of Economic Policy: a Comparative Perspective* (Ottawa: Industry Canada).

Anderson, Robert D. and William E. Kovacic, "Competition Policy and International Trade Liberalization: Essential Complements to Ensure Good Performance in Public Procurement Markets," *Public Procurement Law Review*, 2009, issue 2, pp. 67-101.

Anderson, Robert D., William E. Kovacic and Anna Caroline Müller (2011). "Ensuring integrity and competition in public procurement markets: a dual challenge for good governance," in Sue Arrowsmith and Robert D. Anderson, *The WTO Regime on Government Procurement: Challenge and Reform* (Cambridge University Press), chapter 22, pp. 3-58.

Anderson, Robert D. and Hannu Wager (2006). "Human Rights, Development, and the WTO: The Cases of Intellectual Property and Competition Policy," *Journal of International Economic Law,* Volume 9, Issue 3, pp. 707-747.

Beato, Paulina and Jean-Jacques Laffont (2002). "Competition in public utilities in developing countries." Inter-American Developing Bank Washington, D.C., Sustainable Developing Department, Technical Papers Series. Available at: http://cdi.mecon.gov.ar/biblio/docelec/MU2007.pdf.

Brooks, Douglas H. and David Hummels (2009). *Infrastructure's Role in Lowering Asia's Trade Costs* (Cheltenham: Edward Elgar).

Cameron, Alexandra, M. Ewen, D. Ross-Degnan, D. Ball and R. Laing. (2009). "Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis" *The Lancet*, Volume 373, Issue 9659, Pages 240 - 249. Available at: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(08)61762-6/abstract#aff1. Earlier published version available at http://apps.who.int/medicinedocs/documents/s17061e/s17061e.pdf.

Cameron, Alexandra, M. Ewen, M. Auton, and D. Abegunde. (2011). *The World Medicines Situation 2011: Medicines Prices, Availability and Affordability*. (World Health Organization: Geneva). Available at: http://apps.who.int/medicinedocs/en/m/abstract/Js18065en/.

Coate, Malcolm B. (1985). "Techniques for Protecting Against Collusion in Sealed Bid Markets," 30 *Antitrust Bulletin*, 1985, 897, 899-90.

Collier, Paul (2008). *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It* (Oxford University Press).

Competition Commission of South Africa (2009). *Unleashing Rivalry: Ten years of enforcement by the South African competition authorities 1999-2009.* Available at: http://www.compcom.co.za/assets/Uploads/AttachedFiles/MyDocuments/10year.pdf.

Connor, John M. (2004). "Global Antitrust Prosecutions of Modern International Cartels." 4 *Journal of Industry, Competition and Trade* 3, pp. 239-267. Draft available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=611886.

Connor, John M. and Yuliya Bolotova (2005). *Cartel Overcharges: Survey and Meta-Analysis*. Available at: http://ssrn.com/abstract=788884.

Connor, John M. and C. Gustav Helmers (2006). 'Statistics on Modern Private International Cartels, 1990-2005,' AAI Working Paper No. 07-01. Available at: http://antitrustinstitute.org/~antitrust/node/10720.

Connor, John M. (2007). *Optimal Deterrence and Private International Cartels. Research Paper, Department of Economics*, Purdue University. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=787927.

Dutz, Mark A. (2002) "Competition policy issues in developing and transition markets," Presentation at the OECD Global Forum on Competition, Paris, 14-15 February 2002.

European Commission (2012). *Report on competition law enforcement and market monitoring activities by European competition authorities in the food sector*. Available at: http://ec.europa.eu/competition/ecn/food_report_en.pdf.

FAO (2009). The State of Agricultural Commodity Markets 2009. Available at: http://www.fao.org/docrep/012/i0854e/i0854e00.htm.

Fox, Eleanor (2006). "The WTO's First Antitrust Case – Mexican Telecom: A Sleeping Victory for Trade and Competition," *Journal of International Economic Law* 9(2), 271–292.

Gönenç, Rauf, Maria Maher and Guiseppe Nicoletti (2001). "The Implementation and the Effects of Regulatory Reform: Past Experience and Current Issues." *OECD Economic Studies* 32(11) (Paris: OECD).

Haas, Ryan A. (2003). "Act Locally, Apply Globally: Protecting Consumers from International Cartels by Applying Domestic Antitrust Law Globally." 15 *Loyola Consumer Law Review* 2, pp. 99-124.

Hawkins, Loraine (2011) "Working Paper 4: Competition Policy," *WHO/HAI Project on Medicine Prices and Availability: Review Series on Pharmaceutical Pricing Policies and Interventions*. Available at: http://www.haiweb.org/medicineprices/05062011/Competition%20final%20May%202011.pdf.

Hufbauer, Gary and Sherry Stephenson (2007). "Services Trade: Past Liberalization and Future Challenges," 10 *Journal of International Economic Law* 3, 605–630.

International Trade Centre (Principal authors: Robert D. Anderson, Frédéric Jenny and Anna Caroline Müller (2012). *Combating Anti-Competitive Practices: A Guide for Developing Economy Exporters* (Geneva: ITC).

Jenny, Frédéric (2002). *International Co-operation on Competition: Myth, Reality and Perspective.* Paper presented at the University of Minnesota Law School Conference on Global Antitrust Law and Policy. Available at: http://www.iilj.org/courses/documents/HC2003.Jenny.pdf.

Jenny, Frédéric and Pradeep S. Mehta (2012). "Global problems & solutions," *The Financial Express*, posted online 13 January 2012 and available at: http://www.financialexpress.com/news/global-problems-&-solutions/899105/0.

Kahn, Alfred E. (1988). *The Economics of Regulation: Principles and Institutions* (Cambridge, Massachusets; London, England: MIT Press).

Kessides, Ioannis (2004). *Reforming Infrastructure; Privatization, Regulation, and Competition* (Washington, D.C.: World Bank).

Kommerskollegium (2011). *Cross-border public procurement: an EU perspective* (National Board of Trade, ISBN 978-91-86575-22-9). Available at http://www.kommers.se/Documents/dokumentarkiv/publikationer/%C3%96vriga%20publikationer/Report%20-%20Cross-border%20Public%20Procurement.pdf.

Kovacic, William E. (2001) "Institutional Foundations for Economic Legal Reform in Transition Economies: The Case of Competition Policy and Antitrust Enforcement," 77 *Chicago-Kent Law Review* 256-315.

Kovacic, William E., Robert C. Marshalll, Leslie M. Marx and Matthew E. Raiff (2006). "Bidding Rings and the Design of Anti-Collusive Measures for Auctions and Procurements," in Nicola Dimitri, Gustavo Piga and Giancarlo Spagnolo, *Handbook of Procurement* (Cambridge: Cambridge University Press), chapter 15.

Lamy, Pascal (2012). "Trade and health: making synergy a practical reality," *Global Health* (May 2012). Available at: http://www.newsdeskmedia.com/files/Global-Health-2012.pdf.

Lee, Jae Sung (2005). *Towards a Development-Oriented Multilateral Framwork on Competition Policy.* bepress Legal Series. (Working Paper 785). Available at: http://law.bepress.com/expresso/eps/785.

Levenstein, Margaret C. and Valerie Y. Suslow (2004). "Contemporary International Cartels and Developing Countries: Economic Effects and Implications for Competition Policy." 71 Antitrust Law Journal 3 (2004), pp. 801-852.

Levenstein, Margaret C. and Valerie Y. Suslow (2008). "International Cartels." 2 *Issues in Competition Law and Policy* 1107 (ABA Section of Antitrust Law 2008), pp. 1107-1126.

Levenstein, Margaret C. and Valerie Y. Suslow (2011). "Breaking Up Is Hard to Do: Determinants of Cartel Duration." 54 Journal of Law and Economics 2 (May 2011), pp. 455-492.

McCorriston, Steven and Ian M. Sheldon (2007). "Trade Liberalization and Rent Distribution in Vertically Related Markets". In Johan F.M. Swinnen (editor), *How the Globalization of Food Systems and Standards Affects Rural Development and Poverty*. CAB International:Wallingford, 2007.

Minten, Bart, Lalaina Randranarison and Johan F.M. Swinnen (2006). *Global Retail Chains and Poor Farmers: Evidence from Madagascar.* LICOS Discussion Paper 164/2006. Available at: http://ideas.repec.org/p/lic/licosd/16406.html.

Müller, Anna Caroline and Pelletier, Philippe (forthcoming). "Competition Policy and Government Procurement: Two Missing Links in the Debate on Public Health", WTO Staff Working Paper.

OECD (1998A). *Recommendation of the Council concerning Effective Action Against Hard Core Cartels,* Competition Committee, 25 March 1998 [C(98)35/FINAL]. Available at: http://acts.oecd.org/Instruments/ShowInstrumentView.aspx?InstrumentID=193&InstrumentPID=189&Lang=en&Book=False.

OECD (1998B) *Policy Roundtable on the Relationship between Regulators and Competition Authorities*. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm.

OECD (2000), Policy Roundtable on Competition and Regulation Issues in the Pharmaceutical Industry. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm

OECD (2001) *Recommendation of the Council concerning Structural Separation in Regulated Industries* (adopted by the Council at its 1003rd session on 26 April 2001[C/M(2001)9]). Available at: http://www.oecd.org/dataoecd/24/49/25315195.pdf.

OECD (2002). *Fighting Hard Core Cartels: Harm, Effective Sanctions and Leniency Programmes.* OECD Publications Service, Paris, France. Available at: http://www.oecd.org/dataoecd/49/16/2474442.pdf.

OECD (2004), Policy Roundtable on Enhancing Beneficial Competition in the Health Professions. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm

OECD (2005A). Hard Core Cartels: Third report on the implementation of the 1998 Council Recommendation. OECD Publications Service, Paris, France. Available at: http://www.oecd.org/dataoecd/58/1/35863307.pdf.

OECD (2005B), Policy Roundtable on Competition in the Provision of Hospital Services. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm.

OECD (2006A) *Report on Experiences with Structural Separation*, Competition Committee, June 7 2006. Available at: http://www.oecd.org/dataoecd/50/63/45518043.pdf.

OECD (2006B), Policy Roundtable on Competition, Patents and Innovation. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm.

OECD (2009A) Policy Roundtable on Generic Pharmaceuticals. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm.

OECD (2009B) Policy Roundtable on Competition, Patents and Innovation II. Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/bestpracticeroundtablesoncompetitionpolicy.htm.

OECD (2010A). *Health care systems: Getting more value for money* (OECD Economics Department Policy Notes, No. 2.) Available at http://www.oecd.org/economy/productivityandlongtermgrowth/46508904.pdf.

OECD (2010B). *Value for Money in Health Spending*, OECD Health Policy Studies, OECD Publishing. Available at http://www.oecd-ilibrary.org/social-issues-migration-health/value-for-money-in-health-spending_9789264088818-en.

OECD (2010C) *Roundtable on Collusion and Corruption in Public Procurement* (Directorate for Financial and Enterprise Affairs, Competition Committee DAF/COMP/GF(2010)6). Available at http://www.oecd.org/competition/cartelsandanti-competitiveagreements/46235884.pdf.

OECD (2011A). *Report on Experiences with Structural Separation*, available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/50056685.pdf.

OECD (2011B). *Recommendation of the OECD Council Concerning Structural Separation in Regulated Industries* (amended on 13 December 2011 [C(2011)135 and CORR1]). Available at http://www.oecd.org/regreform/liberalisationandcompetitioninterventioninregulatedsectors/50119298.pdf.

OECD (2012). *Recommendation of the Council on Fighting Bid Rigging in Public Procurement.* Available at: http://www.oecd.org/daf/competition/RecommendationOnFightingBidRigging2012.pdf.

Osakwe, Chiedu (2001). *Poverty Reduction and Development: The Interaction of Trade, Macroeconomic and Regulatory Policies* (10th Joseph Mubiru Memorial Lecture Organized by the Bank of Uganda).

Qaqaya, Hassan and George Lipimile (2008). *The Effects of Anti-Competitive Practices on Developing Countries and their Development Prospects* (Geneva: UNCTAD).

Rodrik, Dani (2012). *The Globalization Paradox: Democracy and the Future of the World Economy* (Norton).

Sachs (2005). *The End of Poverty: Economic Possiblities for Our Time* (Penguin Press).

Schmidt, Jonathan T. (2006). "Keeping US Courts Open to Foreign Antitrust Plaintiffs: A Hybrid Approach to the Effective Deterrence of International Cartels." 31 *The Yale Journal of International Law*, pp. 211-264.

Sen, Amartya (1999). *Development as Freedom* (Oxford/New York: Oxford University Press).

Stiglitz, Joseph (2007). *Making Globalization Work* (New York: W. W. Norton).

Stiglitz, Joseph (2012). *The Price of Inequality*: How Today's Divided Society Endangers Our Future (New York: W. W. Norton)

Swinnen, Johan F.M. and Miet Maertens (2007). *Globalization, privatization, and vertical coordination in food value chains in developing and transition countries*. Plenary paper prepared for presentation at the International Association of Agricultural Economists Conference, Gold Coast, Australia. August 12-18, 2006.

Teravaninthorn, Supee and Gaël Raballand (2009). *Transport prices and costs in Africa: A review of the main international corridors* (Washington, D.C.: World Bank).

Transparency International (2006), *Global Corruption Report 2006: Corruption and Health*. Available at http://archive.transparency.org/publications/gcr/gcr_2006.

UNIDO (2006). *Global value chains in the agrifood sector.* Available at: http://www.unido.org/fileadmin/user_media/Publications/Pub_free/Global_value_chains_in_the_agrifood_sector.pdf.

United Kingdom Competition Commission (2011A). *Kerry Foods / Headland Foods Merger Inquiry: summary of preliminary findings.* Available at: http://www.competition-commission.org.uk/inquiries/ref2011/kerry_headland/index.htm.

United Kingdom Competition Commission, Press Release (2011B). *Frequently Asked Questions on the Orders and Recommendations made after the Groceries Market Investigation.* Available at: http://www.competition-commission.org.uk/groceries_faq_may_2011.pdf.

United States Department of Justice (2009). *Toward a Competition Policy Agenda for Agriculture Markets* - Prepared remarks of Deputy Assistant Attorney General Philip J. Weiser for the Organization of Competitive Markets, 11th Annual Conference, St. Louis, Missouri. Available at: http://www.justice.gov/atr/public/workshops/ag2010/prepared-remarks.html.

United States Department of Justice (2012A). *Competition and Agriculture: Voices from the Workshops on Agriculture and Antitrust Enforcement in our 21st Century Economy and Thoughts on the Way Forward*. Available at: http://www.justice.gov/atr/public/reports/283291.pdf.

United States Department of Justice (2012B), *Intensification of International Cooperation: The Antitrust Division's Recent Efforts* - Rachel Brandenburger, Special Advisor, International Antitrust Division, Remarks as Prepared for the American Chamber of Commerce Brussels, Belgium. Available at: http://www.justice.gov/atr/public/speeches/281609.pdf.

WHO (2010) "Health systems financing: the path to universal coverage" *World Health Report*. Available at http://www.who.int/whr/2010/en/index.html.

WHO/WIPO/WTO (2013). *Promoting Access to Medical Technologies and Innovation: Intersections between public health, intellectual property and trade.* Available at: http://www.wipo.int/export/sites/www/freepublications/en/global_challenges/628/wipo_pub_628.pdf.

Wilcox, M. D. and P. C. Abbott. 2004. "Market Power and Structural Adjustment: The Case of West African Cocoa Market Liberalization." Selected paper presented at 2004 AAEA Annual Meeting.

World Bank (2005). *A Guide to Competitive Vouchers in Health*. Available at http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/Peer-Reviewed-Publications/AGuidetoCompetitiveVouchersinHealth.pdf.

World Bank (2009). *Europe and Central Asia - Health insurance and competition*. Available at http://documents.worldbank.org/curated/en/2009/05/10792681/europe-central-asia-health-insurance-competition;

World Bank (2011). *Using a Multi-stakeholder Approach to Improve Governance in Pharmaceutical Procurement*. Available at: http://wbi.worldbank.org/wbi/document/using-multi-stakeholder-approach-improve-governance-pharmaceutical-procurement.

World Trade Organization (1997). "Special Study on Trade and Competition Policy", in *Annual Report for 1997* (Geneva), chapter IV.

WTO Working Group on the Interaction between Trade and Competition Policy (1998). *Annual Report of the Working Group on the Interaction between Trade and Competition Policy to the General Council*, Geneva, WT/WGTCP/2. Available at: http://docsonline.wto.org/.

World Trade Organization (2006). *WTO Dispute Settlement: One-Page Case Summaries* (Geneva). Available at http://www.wto.org/english/res_e/booksp_e/dispu_summary06_e.pdf.