What is the Relationship between Competition Law and Policy and Economic Development?

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I. Introduction.

What possible contributions to economic development can the appropriate enforcement of competition law make? What harm could result from such enforcement? These two questions are uppermost in the minds of many policymakers, analysts, and scholars as they debate the merits of introducing and then implementing national competition laws. Now that, according to some counts nearly 100 nations—many of which are in the Asia-Pacific—have adopted competition laws, one might have thought this debate has been won by advocates of such legislation. However, both supporters and opponents are well aware that the effects of competition law can be neutralized or offset well after the enactment of legislation, through denying the relevant enforcement agency the resources, the freedom, and the political support to complete its assigned functions. Therefore, the debates over the merits of competition law continue and the objective of this chapter is to

state and evaluate the many ways in which fostering inter-firm rivalry can alter different aspects of national economic performance. A number of competing perspectives are discussed in section three of this chapter. First, however, the technical nature of the debate over competition law requires clarification of the meaning of a number of important terms used in the existing literature. The payoff from this is to highlight the important difference between competition law and competition policy, two terms that are frequently confused in policy debates. The next section of this chapter is devoted to such matters and sets the stage for the substantive discussion that follows.

II. The relationship between competition law and competition policy.

Before specifying the means and ends of competition law and competition policy, I introduce some key terms that recur throughout the existing literature on the role of competition law and economic development.

II.1 Objectives, instruments, and efficiency.

First, it will be useful to distinguish between the *final* and *intermediate* objectives of a state policy.[1] The former relate to the ultimate goal that the policy is intended to achieve and not to some proximate goal. The latter can be some goal, perhaps even an important goal, that must be accomplished before the final objective can be attained. For example, as will be discussed at greater length later, some scholars believe the ultimate goal of competition policy is to further economic development, and that this can be accomplished

[1] Alternative accounts of the objectives of competition law and policy can be found in Graham and Richardson (1997, pages 8-13) and in American Bar Association (2003, in particular sections III and IV).

through faster economic growth (amongst other means). The same scholars take the view that raising investment outlays by firms stimulates economic growth and that, using the terminology introduced above, increasing investment expenditures is an intermediate objective of competition policy[2]. Nothing prevents a state policy from having multiple final or intermediate objectives.

The objectives of policy are to be further distinguished from the instruments that a government has at its disposal to secure those objectives. These instruments include measures that a state, court, or their delegated representatives are empowered to take.

The concept of efficiency is widely used in discussing the objectives of competition law and policy and will be used extensively throughout this chapter. Voluntary economic exchange, by definition, involves a purchaser paying an amount for a good that is equal to or less than the most they would be willing to pay for that item. The difference between the amount actually paid and the most that a customer would be willing to pay is known as the consumer surplus of the transaction. Producers, on the other hand, will supply a good if the price they receive from selling it equals or exceeds their incremental costs, and this difference is called the producer surplus of the transaction. Adding across all transactions, the individual consumer and producer surpluses yields the *sum* of the *total* producer and consumer surpluses of a given market outcome or outcomes. Economists then define a market outcome to be efficient if there is no other way to organize the exchanges in the same market so as to increase the *sum* of total producer surplus and total consumer surplus.

[2] It is not the purpose of the current discussion to assess the validity of these claims; that matter will be taken up later.

The concept of efficiency has both static and dynamic aspects. Static efficiency refers to maximization of the benefits of voluntary exchange at a given point in time; that is, maximizing the sum of producer and consumer surpluses in a given market *at a point in time*. Dynamic efficiency refers to the maximization of the sum of such surpluses *over time* or *over a specific time horizon*. The latter takes account, in particular, of the impact of technical progress, innovation, and investments of various types.[3]

When describing the concept of efficiency, some have found it useful to take a different tack and distinguish between four different types of efficiency. Kolasky and Dick (2002), for example, differentiate between allocative efficiency, productive efficiency, transactional efficiency, and dynamic efficiency. In their taxonomy of efficiencies, the first three efficiencies are essentially static in nature. Allocative efficiency is described by them as follows:

> "At the most general level, a market is said to achieve 'allocative efficiency' when market processes lead society's resources to be allocated to their highest value use among all competing uses. In the context of market exchanges between consumers and producers, the allocative efficiency principle can be restated more specifically to say that the value of a product in the hands of consumers is equalized 'at the margin' to the value of the resources that were used to produce that product" (Kolasky and Dick 2002, page 49).

Kolasky and Dick then go on to specify the concept of productive efficiency:

[3] It should also be noted in this regard that a link between dynamic efficiency and commonly-used and observable measures of long-term economic performance, such as economic growth, is often implied—if rarely stated—in the existing literature on the role of competition policy in economic development. This is in spite of the fact that, strictly speaking, the definitions of dynamic efficiency and variables such as economic growth are different.

> "Production is said to be efficient when all goods are produced at minimum possible total cost. An equivalent way of phrasing the productive efficiency criterion is to say that there is no possible rearrangement or alternative organization of resources (such as labor, raw materials, and machinery) that would increase the output of one product without necessarily forcing a reduction in output for at least one other product. This restatement highlights the principle that firms' choices involve explicit trade-offs between competing demands for scarce resources" (pages 51-52).

Transactional efficiency is the another type of efficiency described in Kolasky and Dick (2002). They note that:

> "…market participants design business practices, contracts, and organizational forms to minimize transaction costs and, in particular, to mitigate information costs and reduce their exposure to opportunistic behavior or [so-called] 'hold ups' " (page 58).

Business practices may differ in the magnitude of the costs that parties must incur in order to transact with one another and, therefore, some practices may be more "efficient" than others in this regard.

Dynamic efficiency is described by Kolasky and Dick and in terms similar to that above:

> "Whereas allocative and productive efficiency can be viewed as static criteria—holding society's technological know-how constant—a more dynamic view of efficiency examines the conditions under which technological know-how and the set of feasible products optimally can be expanded over time through means such as learning-by-doing, research and development, and entrepreneurial creativity" (page 56).

II.2 The evolving objectives of competition law and policy.

Over the last one-hundred or so years there has been an evolution in the importance given to different objectives of competition policy. The goal of the following paragraphs is to describe that evolution and to discuss the view that developing countries have different objectives for their competition policies than industrialized economies. The goal here is *not* to assess the merits of different stated objectives of competition policy[4] and the fact that any objective is listed below should not be taken as an endorsement of that objective.

Initially, protecting market processes and rights to engage in commerce were accorded a high priority in national competition policies, as the following quotation from a joint World Bank and OECD study points out:

> "While many objectives have been ascribed to competition policy during the past hundred years, certain major themes stand out. The most common of these objectives cited is the maintenance of the competitive process or of free competition, or the protection or promotion of effective competition. These are seen as synonymous with striking down or preventing unreasonable restraints on competition. Associated objectives are freedom to trade, freedom of choice, and access to markets. In some countries, such as Germany, freedom of individual action is viewed as the economic equivalent of a more democratic constitutional system. In France emphasis is placed on competition policy as a means of securing economic freedom, that is, freedom of competition" (World Bank-OECD 1997, page 2).

[4] There is a fairly rigorous debate on this subject see, for example, the references in footnote 1 of this chapter.

This quotation suggests that protecting economic freedom and competitive processes as well as fairness have historically been seen as objectives of competition policy in many countries. In a similar vein, the new competition law of India refers, in its preamble, to the objectives of preventing practices having adverse effects on competition, promoting and sustaining competition in markets, protecting the interests of consumers, and ensuring freedom of trade carried on by other participants in markets in India.[5]

Only after competition laws were enacted did a school of thought develop that justified certain competition laws on the grounds that they resulted in improvements in economic efficiency. In fact, the logic of static analyses of efficiency in markets and the rhetoric of "protecting the competitive process" as well as a focus on consumer welfare often went hand in hand. Posner (1976), for example, was to argue in his seminal treatise on US antitrust law that the "fundamental objective" of such law is "the protection of competition and efficiency" (Posner 1976, page 226). This perspective gained considerable currency and accounts for the central role that static economic efficiency still plays in many accounts of competition law and policy.

More recently, a wide range of opinion has stressed the importance of dynamic efficiency as a legitimate and compelling objective of competition policy. For example, Singh (2002) argues that competition policy in developing economies should support the overall development path of an economy. He points to:

> "the need to emphasise dynamic rather than static efficiency as the main purpose of competition policy" (Singh 2002, page 22).

[5] India, The Competition Act, 2002 (No. 12 of 2003), available on the Internet at http://dca.nic.in/competition_act2002.pdf

In a related vein, Audretsch *et al*. (2001), Baker (1999), Baumol (2001), and Posner (2001) make the point that the nature of technologies or consumer preferences in certain industries and/or the fast pace of innovation in some industries, call for a reassessment of the weight given to static efficiency as an objective of competition policy. Consistent with this view, in many jurisdictions with active competition regimes the promotion of innovation or dynamic efficiency gains has become an important goal of competition policy, and the application of competition law explicitly takes account of this objective. For this reason, it is misleading to suggest that competition policy as it is currently practiced in major jurisdictions attaches little or no importance to considerations of dynamic efficiency. For the moment, however, it suffices to note that scholars of market processes in developing and industrial nations increasingly point to the importance of dynamic efficiency considerations as an appropriate objective of competition policy. And that concerns about dynamic efficiency are not the sole preserve of either wealthier or poorer economies.

As well, it should be noted that many states have explicitly introduced other objectives into their national competition laws. For example, the Competition Act of 1998 in South Africa states that:

> "The purpose of this Act is to promote and maintain competition in the Republic in order
>
> (a) to promote the efficiency, adaptability and development of the economy;
>
> (b) to provide consumers with competitive prices and product choices;

(c) to promote employment and advance the social and economic welfare of South Africans;

(d) to expand opportunities for South African participation in world markets and recognise the role of foreign competition in the Republic;

(e) to ensure that small and medium-sized enterprises have an equitable opportunity to participate in the economy; and

(f) to promote a greater spread of ownership, in particular to increase the ownership stakes of historically disadvantaged persons" (Chapter 1, article 2).

This multiplicity of goals reflects the fact that:

"A fundamental principle of competition policy and law in South Africa thus is the need to balance economic efficiency with socio-economic equity and development[6]"

This example demonstrates that competition law need not be directed towards a single objective, as is often alleged.

II.3 The instruments of competition policy and of competition law.

Turning now to the instruments of competition policy, it is important to recognize that such policy is concerned both with private anti-competitive practices and with government measures or instruments that affect the state of competition in markets. For example, trade barriers, barriers to foreign direct investment, and licensing requirements

[6] Taken from the Introduction, web page of the South African Competition Commission, at http://www.compcom.co.za/aboutus/aboutus_intro.asp?level=1&desc=7

(amongst others) can influence the extent of competitive pressures in markets and so are appropriate concerns of competition policy.

In many jurisdictions, the anti-competitive effects of government measures more generally are addressed through the instrument of competition advocacy activities. In a report to the International Competition Network, its Advocacy Working Group defined this instrument as follows:

> "Competition advocacy refers to those activities conducted by the competition authority related to the promotion of a competitive environment for economic activities by means of non-enforcement mechanisms, mainly through its relationship with other governmental agencies and by increasing public awareness of the benefits of competition" (ICN 2002, page i).

The potential contribution of competition advocacy activities to national economic performance has been discussed extensively at the International Competition Network, at the OECD, and in the WTO Working Group on the Interaction between Trade and Competition Policy. Specific examples of competition advocacy

> "include public education activities, studies and research undertaken to document the need for market-opening measures, formal appearances before legislative committees or other government bodies in public proceedings, or 'behind-the-scenes' lobbying within government (Anderson and Jenny 2002, page 7)."

It is noteworthy that the first function that the new competition enforcement agency in India was allowed to perform is competition advocacy. The target of this advocacy has

included sectoral regulators and national and sub-national (state) government agencies and ministries.

Notwithstanding the importance attached to competition advocacy, another instrument—namely competition law and its enforcement —is at the centre of competition policy in many countries. Audretsch *et al*. (2001) describes competition law as follows:

> "Competition (or antitrust) law lays down the rules for competitive rivalry. It comprises a set of directives that constrain the strategies available to firms" (page 614).

Hoekman and Holmes (1999) add more specificity by defining national competition law:

> "as the set of rules and disciplines maintained by governments relating either to agreements between firms that restrict competition or to the abuse of a dominant position (including attempts to create a dominant position through mergers)" (page 877).

UNCTAD (2002) provides a list of firms' actions that can fall within the purview of competition law. Although there is no agreed list of the elements of competition law, the following five figure prominently in most accounts of such laws:

1. Measures relating to agreements between firms in the same market to restrain competition. These measures can include provisions banning cartels as well as provisions allowing cartels under certain circumstances.
2. Measures relating to attempts by a large incumbent firm to independently exercise market power (sometimes referred to as an abuse of a dominant position).

3. Measures relating to firms that, acting collectively but in the absence of an explicit agreement between them, attempt to exercise market power. These measures are sometimes referred to as measures against collective dominance.

4. Measures relating to attempts by a firm or firms to drive one or more of their rivals out of a market. Laws prohibiting predatory pricing are an example of such measures.

5. Measures relating to collaboration between firms for the purposes of research, development, testing, marketing, and distribution of products.

This list of five instruments is not supposed to be exhaustive, nor is it meant to suggest that each element is given the same weight or referred to in the same terms in each country with a functioning competition law.

With these foregoing remarks in mind, therefore, it is worth stressing that the following four state interventions fall outside the remit of competition law:

1. Consumer protection laws, such as those relating to faulty products, warrantees, and misleading advertising.

2. Unfair trade laws, such as anti-dumping laws, counter-vailing duties laws, and measures to protect national industries against surges in imports.

3. Government policies towards the registration of new businesses and taxation and corporate governance oversight of existing businesses.

4. Trade policies and policies towards foreign direct investments more generally. (However, please note policies towards mergers and acquisitions fall within the scope of competition law.)

Moreover, in those jurisdictions with competition laws not all of the firms in, or sectors of, the respective economies are subject to the disciplines of the competition legislation. The nature and extent of exemptions to national competition laws varies markedly across nations. Firms which engage in anti-competitive practices at the behest of the government are often exempt too from competition law. In addition, many competition laws include provisions that allow the government or an independent agency to grant exemptions to firms or sectors after the competition law has been enacted.

The above discussion—which may seem laborious to those very familiar with competition law and policy—is important given the widespread misconceptions about the nature and scope of competition law. Competition law is far more narrowly prescribed than many observers think. Confusion often arises when competition law is conflated with competition policy; the former is one of the many instruments of the latter.

II.4. Final remarks.

This section described in some detail the elements and scope of competition law. It has been shown that the objectives of competition law are not restricted to static efficiency and in many cases extend to include considerations of dynamic efficiency. Moreover, competition law is only a subset of a nation's competition policies and should not be confused a number of other policies that can affect the intensity of competition in nation's markets.

III. Competition, the enforcement of competition law, and economic development.

The goal of this section is to describe the major conceptual linkages between the implementation of competition law and the factors which are thought to influence dynamic economic efficiency. To establish a point of departure, recall that in a competitive market in the absence of government interventions, asymmetries of information, impediments to the entry and exit of firms, and anti-competitive practices by firms, prices and quantities will settle down to levels that generate economically efficient outcomes at a given point of time; that is, attaining static efficiency. In this situation, the prices that consumers pay for a good will equal the incremental (or marginal) costs of the firm that produced the last unit of the good. Cartelization and collusion by firms, which raise prices above incremental costs, will result in a market outcome where the sum of producer and consumer surpluses fall below the level attained with static efficiency. Consequently, measures to enforce competition laws that encourage firms to compete (or discourage or prevent firms from resisting rivalry) will improve the allocation of resources, by making market outcomes move towards the statically efficient outcome.

In general, therefore, tensions are unlikely to arise between the appropriate enforcement of competition laws and the attainment of efficiency in a static sense.[7] But does the enforcement of competition law and inter-firm rivalry impede the attainment of *dynamic* efficiencies, and thereby the *long-term* performance of economies? This question is the focus of the next two sub-sections of this chapter.

[7] This statement assumes that the approach taken to the enforcement of competition law gives due regard to technological and other considerations (e.g., the importance of scale economies) that may arise in particular sectors.

III.1. Trade-offs between competition law enforcement and dynamic efficiency and long term economic performance.

This sub-section describes and evaluates four arguments identified in relevant literature and policy discourse as to how the application of competition law might compromise dynamic efficiency and long term economic performance. It is important to appreciate that the objective here is to accurately characterize—and then assess—a number of viewpoints that have received attention in discussions among policymakers and civil society, as well as in academia, on national and international competition policy matters. For this reason, some of the perspectives presented here do not necessarily represent what might be thought of as mainstream academic opinion.

The basis for the *first* such argument is the realization that, unlike industrial countries, in many cases developing economies do not have well functioning factor markets—such as stock exchanges and bond markets—and often have not been able to create institutions that support the operation of markets such as bankruptcy codes, efficient contract enforcement, and the like (Laffont 1998). These "missing markets" and "missing institutions" are said to alter the optimal degree of competition in an economy and, therefore, have implications for the vigor and manner with which competition policy should be enforced. It is also argued that these considerations are especially important when considerations of dynamic efficiency drive policymaking. Singh (2002) explains the logic underlying this argument:

> "In order to raise living standards of their people over time, developing economies need high rates of investment to achieve fast rates of growth of productivity. High

rates of investment in turn normally require reasonable, if not, high rates of profits in order to maintain the private sector's propensity to invest. This consideration leads to the view that there may at times be too much competition rather than too little. Competition would be too much if it leads to price wars, sharp falls in profits, all of which are likely to diminish the corporate desire to invest" (page 19).

Implicit in this perspective is the assumption that firms in developing economies have to raise funds internally and not through borrowing from banks or other financial intermediaries. If such borrowing is not possible, then an attenuation of competitive pressures is said to enable firms to raise prices and secure funds for investment.[8] Tilton (1996) is explicit about the effects of policies that reduce competition among firms in the following remark:

"To the degree that these policies raise prices, they channel resources from consumers towards targeted industries" (page 3).

Singh (2002) also argued that reducing rivalry involves more than maintaining prices set by firms. Excess capacity must also be attended to because, in his view, it can trigger price wars. Governments would, therefore, have to take an active role in managing investment decisions by firms in high growth or targeted industries (see Singh 2002, page 19). In sum, this argument calls into question whether a maximal degree of competition is optimal and suggests that increasing economic growth requires a mix of cooperation and competition by firms.

[8] Of relevance to this argument is the evidence presented in Glen *et al.* (2001, 2002) that implies that the profits earned by firms in developing countries tend to fall faster than in the industrialised economies. If this finding is correct, and firms in developing countries are indeed unable to raise funds from banks or from stockmarkets, then market forces would be effectively undermining the capacity of profitable firms to invest.

A slightly different variant of this argument has been advanced by Amsden and Singh (1994) in their analysis of "The optimal degree of competition and dynamic efficiency in Japan and Korea". They observed that:

> "In general, whether competition was promoted or restricted [in Japan] depended on the industry and its life cycle: in young industries, during the developmental phase, the government discouraged competition; when the industries became technologically mature, competition was allowed to flourish. Later, when industries are in competitive decline, the government again discourages competition and attempts to bring about an orderly rationalisation of the industry (page 945)."[9]

Although these authors do not provide an explicit explanation for these claims, *two* arguments that are consistent with the thrust of Singh (2002) might be developed (without endorsement!) along the following lines. In the case of young or nascent industries, firms may need to finance growth and reducing rivalry will result in higher prices that, in turn, can generate the internal funds to attain this goal.

The argument for constraining competition in declining industries might proceed as follows. If firms have soft budget constraints or face little threat from bankruptcy proceedings, then declining industries may perennially experience price wars and few exits from the industry. Such price wars will result in firms building up losses and greater debts year after year. These ever-growing debts may end up compromising the solvency of the industry's principal financial backers of the firms—that could be the state itself or banks—which in turn could have serious macroeconomic consequences. This outcome may be prevented if firms are discouraged by the state from engaging in price

[9] Amsden and Singh (1994) cite Okimoto (1990) in support of this claim.

wars while steps are taken by firms and the government to bring productive capacity into line with falling demand.

One way to assess these arguments is to identify the intermediate objectives of competition policy that are being alluded to. In Singh's first formulation the intermediate objective was to increase investment outlays.[10] The question, therefore, arises as to whether restricting rivalry is the *least costly means* to obtain this intermediate objective; a claim that is not demonstrated in Singh's analysis. As Tilton acknowledges, reducing rivalry has the effect of increasing prices paid by customers. In contrast, an investment subsidy or tax credit that stimulated investment by the same amount as reducing rivalry, would not have the same direct and adverse effect on customers' welfare. Admittedly, the investment subsidy or tax credit would have implications for the government's budget. Another alternative could be to channel investment funds through the nation's banking system. Arguably, Singh, Tilton, and others have failed to demonstrate that these alternative policy measures are inferior to restricting rivalry through cartelization or other anti-competitive practices.

A *second* possible trade-off between competition policy and dynamic efficiency is said to occur when firms need to attain a certain size in order to compete effectively on world markets. Some argue that in order to reach the appropriate size, state action is called for; essentially to create or foster so-called "national champions." These state actions may include forced mergers and acquisitions (when a state instructs two or more firms to form a single commercial entity), and state-encouraged mergers and acquisitions by private firms (which can result from adopting merger review regulations that places few

[10] Whether the increased investment outlays are actually used productively or as intended is another important matter, but one that is beyond the remit of this issues paper.

constraints on mergers by firms or that overlook the consequences of a proposed merger or acquisition that are unrelated to competitiveness). Furthermore, there is an issue as to what should be the appropriate competition law enforcement regime for national champions after the latter have been formed. The following discussion clarifies why size might be important for a firm's competitiveness and then discusses some of the implications of the potential relationship between enforcement of competition law, firm size, and considerations of dynamic efficiency.

In principle, firm size is said to be important for corporate "competitiveness" for the following reasons:

1. economies of scale (where larger production runs are associated with low average costs of production),
2. firms need to attain certain minimum scale to successfully innovate or imitate, or to raise funds on capital markets, and when
3. so-called learning-by-doing is faster in larger firms.

When firms do have pronounced economies of scale then it is possible to construct arguments, on efficiency grounds, that enforcing competition law so as to maximise rivalry between firms is not necessarily a good idea. The following representative argument by Lau (1996) is couched in efficiency terms:

> "…the government has to take into account the existence of increasing returns to scale which render the usual market allocation inefficient. For example, if the size of the market will support it, it is better to have one minimum-efficient-scale plant than to build two sub-minimum-efficient-scale plants. This is whether the government can

and should intervene to prevent potentially inefficient and possibly ruinous competition" (page 59).

These arguments still resonate with certain policymakers and scholars. Some point to the desirability of subordinating competition policy to the goal of creating national champions or "national leaders," to use Amsden (2001)'s influential account of the rise of non-Western economies. Referring to the latter as "the rest[11]" she argues:

"After floundering for a century, "the rest" succeeded in creating professionally managed, large scale, national firms" (page 190).

This was accomplished in the following manner:

'National leaders in "the rest," private or public, all shared one characteristic: *they tended to be a product of government promotion*" (Amsden 2001, page 193).[12]

Such promotion could include inducements to firms to merge, forced takeovers, and the like.

Another important feature of policies employed to create national champions is that they *can* involve *discrimination* against foreign firms; that is, these policies have ramifications for international commerce. Such discrimination can be *de jure*; for example, when foreign firms are simply banned from buying or merging with domestic firms in certain sectors. Alternatively, a foreign firm's proposal to buy or to merge with a domestic firm may be reviewed under a different and potentially more stringent procedure than when two domestic firms decide to form a single combination. The discrimination could also

[11] Amsden's use of this term is not meant to be derogatory. She wishes to juxtapose "the West" and "the Rest."
[12] Italics in the original quotation.

be *de facto*; for example, when merger review procedures are implemented in such a way that proposed combinations involving domestic firms are treated differently than those involving at least one foreign firm.

For the present purposes, the issue is not whether governments should or should not promote national champions. Nor is the issue whether mergers or acquisitions actually attain the efficiencies and cost reductions that are envisaged, a matter which has been debated extensively in the industrial organization literature. Rather, the question is whether, in order to do so, governments need or are well-advised to relax the enforcement of competition law. Critics point to at least three arguments in this regard. First, to the extent that the domestic and international markets for a given product are integrated (which is likely to occur when barriers to importation of that product are low or non-existent), then properly executed merger policy in unlikely to challenge the creation of national champion in the first place. This is because prevailing or potential competition from abroad is likely to prevent the merged firm from raising prices and harming domestic consumer welfare. There are circumstances, therefore, where there is no tension between the objectives of competition law and the desire to form national champions. Moreover, in an era of falling trade and investment barriers, the relevance of this argument is growing. It is also worth noting that in relatively integrated markets policymakers should be aware that the creation of national champions will, at best, result in lower costs (through greater scale etc) rather stronger market power. The impact of such champions on national export performance will, therefore, be through selling larger quantities rather than through improving the terms of trade (raising export prices.)

The second argument is that funding overseas expansion by the domestic profits "earned" through gouging domestic consumers with high prices is only one source of such finance. If the gains from overseas expansion are so clearly evident to national policymakers and to the managers and owners of putative national champions, then they should be clear to potential investors too.[13] Relatedly, why should governments sacrifice domestic consumers' welfare (through lax enforcement of competition law) when investors can finance the overseas expansion of national firms?

The third critique builds on long-standing research of Michael Porter and others that has found that export performance is fosters by greater rivalry between domestic firms. Sheltering domestic firms from competition, through a relaxation of the application of national competition law or through other means, is therefore harmful to promoting national export performance. In sum, there are compelling conceptual and evidential reasons to question whether national competition law should be sacrificed at the altar of national champions. These reasons are logically distinct from those that evaluate the merits of promoting national champions in the first place.

The first two perspectives described above purported to show that government measures to restrain rivalry could, in certain circumstances, enhance dynamic efficiency. In contrast, the *third* perspective purports to show that governments need not intervene to promote rivalry—that is, by attacking market power—in markets where innovation is the principal source of competition between firms and there are no barriers to entry by new firms. This third perspective is of much older vintage than the first two. Schumpeter in his classic book *Capitalism, Socialism, and Democracy* contrasted his view of the

[13] One way of putting this is to ask "what is the informational advantage of the government in this respect?"

dynamics of a capitalist economy—which he referred to as "plausible capitalism"—with the:

> "essentially static conception emphasized in the contemporary neoclassical economic analyses, both at the time he wrote and (with only modest amendments) fifty years later" (Scherer 1992, pages 1416-17).[14]

Schumpeter argued that the following types of innovations (or "technological progress", as he put it) drove economic growth: new consumer goods, improved production methods and means of transportation, new markets, and new forms of firm structure and industrial organization. Innovation, however, is an endogenous outcome and is itself driven by entrepreneurs that seek higher profits. According to this view, the riskiness of innovation is such that entrepreneurs are more inclined to invest in innovation when:

> "firms could deploy an array of restrictive practices to protect their investments" (Scherer 1992, page 1417).

Thus,

> "Schumpeter went beyond economists' long-accepted view that the expectation of a monopoly position (e.g. through patent protection on inventions) was necessary to make the venture worthwhile. Monopoly power already held also supported investments in technological progress. Here, Schumpeter argued, both economists and trust-busters had their priorities wrong" (Scherer 1992, page 1418).

In Schumpeter's own words:

[14] Scherer (1992) is cited extensively in this discussion because this academic article contains a balanced account of both Schumpeter's thinking about the operation of market processes and of the research programs that were spawned by his seminal contributions.

> "What we have got to accept is that [the large scale establishment or unit of control] has come to be the most powerful engine…of progress and in particular of the long-run expansion of output not only in spite of, but to a considerable extent through, this strategy which looks so restrictive….In this respect, perfect competition is not only impossible but inferior, and has no title to being set up as a model of ideal efficiency" (Schumpeter 1942, page 106).

Schumpeter argued, further, that innovation resulted in a continual process by which new products simultaneously undermined the position of even entrenched incumbent firms (the so-called process of "creative destruction"). He crystallized the differences between his thesis and the neoclassical conception of competition and its emphasis on static efficiency as follows:

> "But in capitalist reality as distinguished from its textbook picture, it is not [price] competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization…competition which commands a decisive cost or quality advantages and which strikes not at the margins of profits and the outputs of existing firms but at their foundations and their very lives. This kind of competition is as much more effective than the other as a bombardment is in comparison with forcing a door, and so much more important that it becomes a matter of comparative indifference whether competition in the ordinary sense functions more or less promptly; the powerful lever that in the long run expands output and brings down prices is in any case made of other stuff" (Schumpeter 1942, pages 84-5).

As these quotations demonstrate, although Schumpeter presented an alternative conception of the dynamics of market economies—and criticized orthodox analyses for their characterization of market processes—he did not depart from the orthodox prescription that fierce competition between firms is the motor for economic advance. Hence, Schumpeter's theory is not a rejection of competition as the basis of innovation, economic progress, and growth but an alternative vision of how competition occurs.

The implications of Schumpeter's analysis for competition policy can be summarized as follows: state measures that seek to arbitrarily reduce concentration levels or to reduce the profitability of innovative firms should be avoided, since this will diminish the incentives of both incumbent and potential firms to invest in potentially profitable innovations and related activities in the first place.[15] Rather, according to this perspective, attention should focus on addressing barriers that reduce the profitability or likelihood of entry by new firms into an industry.[16] As will be seen below, to an important extent the enforcement of competition law in jurisdictions with active competition regimes has already adapted itself to these insights, by de-emphasizing the control of market concentration *per se* and placing more emphasis on entry conditions and other factors that affect the incentives for innovation in markets.

It is worth noting, in this connection, that extensive empirical research has confirmed that barriers to entry are substantially higher in developing economies than in industrial nations (see Djankov *et al*. 2002 and De Soto 2000). If reforms cannot be introduced to

[15] This raises the empirical question of whether industries with more concentrated sellers tend to have more innovative firms. Scherer (1992) recounts the twists and turns in the empirical literature and summarizes the findings of what he believes is the best research paper on the subject (Geroski 1990). Scherer described the results of the latter study of the propensity to innovate by British firms as follows:

> "innovation was found to be less vigorous in more concentrated industries. Thus, the results did not support the 1942 Schumpeterian conjectures" (Scherer 1992 page 1424).

[16] For related discussion, see Audretsch *et al.* 2001, page 619.

effectively lower these barriers—perhaps because in some situations poor governance practices cannot be eliminated in any realistic time frame—then dynamic efficiency may actually be best served by competition policy measures that prevent incumbent firms from setting higher prices to customers over the longer term. Moreover, to the extent that the enforcement of competition law prevents or discourages incumbent firms from taking steps to foreclose entry by potential rivals, then such enforcement will strengthen the incentives of the latter firms to invest in innovation. This is because these potential competitors will place a lower probability of their eventual entry into a market being impeded and so will have greater confidence that their investments in innovation will bear commercial fruit. Specifically, preserving the ability of innovative firms to enter a market—one of the sources of long-term economic performance in the Schumpeterian world—may well be contingent on the appropriate enforcement of various competition laws.

A *fourth* source of potential tension between competition policy, rivalry, and the realization of dynamic efficiency relates to the existence of atypical production cost or consumer preference structures in certain economic sectors. A possible example of this would be the existence of a natural monopoly – i.e. a situation where, due to overwhelming economies of scale, a market is most efficiently served by a single supplier. Another example which has received much attention in recent literature and policy debates relates to industries where so-called network externalities are pervasive (see White 2001, for an accessible economic analysis of such externalities and the implications for regulatory and competition policy.) In the presence of such externalities, the maximum amount that consumers are willing to pay for a good or service depends, in

part, on the number of other consumers who also purchase the item in question. Admittedly, much of the discussion of network externalities takes place within the context of markets where firms have advanced technologies such as the market for computer software. (In the latter market consumers effectively place a premium on programs that create files which can be opened by and amended in principle by many other persons.) However, it should not be forgotten that many communication and infrastructure services, that are important for economic development, exhibit network externalities. Such services include telephones, railways, etc (see Laffont and Tirole 2000).

Although the analysis of market outcomes in the presence of these externalities can be complex, one theme that does emerge from much of the literature is that there are instances where consumers will prefer that a smaller number of goods (and possibly a single good) be available in the market place. If a small number of firms each supply a different product to a large number of consumers, then the externalities generated for consumers (which result from the fact that each product they consume is consumed by many others) may well exceed any adverse impact on prices that may follow from a high degree of market concentration. Put simply, there may be instances in which consumers may prefer concentrated market outcomes with a small number of firms because of the network externalities that large output levels can create.

Moreover, in such industries, firms may adopt pricing strategies that deliberately take into account the impact of the current number of customers on the desirability of their product to potential customers in the future. The latter may only be willing to buy the product once the number of existing customers exceeds a critical level; in which case,

firms will have an incentive to keep prices lower at present than in the absence of network externalities. Therefore, network externalities benefit current consumers directly and through the stronger than usual disincentives to firms to raise prices. Both theoretical and empirical analyses of industries with network externalities have shown that firms often adopt complex pricing strategies which typically involve substantial price discrimination across customers.

It is worth emphasizing that the above arguments *can* provide an efficiency-based rationale for not taking steps to maximize rivalry between firms in particular (limited) circumstances. Put another way, in *certain sectors* with *observable* and *identifiable* technological characteristics, maximizing rivalry among firms may harm the interests of both consumers and producers. Nonetheless, this does not imply that there is no role for competition policy in these markets; rather, it means that competition policy must be applied in ways that take account of the technological characteristics of such markets—as indeed competition authorities increasingly do.[17] Indeed, recent contributions highlight the importance of (appropriately tailored) competition rules in network industries, due precisely to concerns over the market power that can be created or entrenched through network effects (see, e.g. Church and Ware 1998). As well, since network externalities are not found in every sector of the economy, this fourth perspective provides at most a

[17] A review of the websites of the Antitrust Division of the US Department of Justice (http://www.usdoj.gov/atr/), the Bureau of Competition of the US Federal Trade Commission (http://www.ftc.gov/ftc/antitrust.htm), the European Commission's Directorate-General for Competition (http://europa.eu.int/comm/competition/index_en.html) and the Canadian Competition Bureau (http://strategis.ic.gc.ca/SSG/ct01250e.html), to name just a few of the enforcement agencies in the industrialized world, reveals that such efficiency-based arguments figure extensively in the analyses undertaken and decisions made by enforcement officials, particularly though by no means exclusively in merger enforcement.

sector-specific and not a general counter-argument to the contention that enhanced rivalry promotes dynamic efficiency.

To summarize the findings of this subsection, although all four perspectives outlined above imply that dynamic efficiency may not be best served by consistently maximizing the number of competitors in markets, they differ in other important respects. The fourth perspective is sector-specific in nature, whereas the first three perspectives may be of more general application. Of the three perspectives with general application, only the first two potentially call (even potentially) for state measures to constrain competition. With regard to the third perspective, in a smoothly running Schumpeterian world where there are no significant state-orchestrated barriers to entry, it might be argued that there is no need for competition law enforcement to promote rivalry. Yet, once one allows for the possibility that private firms can create barriers to entry or foreclose entry to a market by new firms, then improving dynamic economic performance may well require the appropriate enforcement of competition laws.

The four perspectives also differ sharply in the assumptions they embody as to what, if any, are the appropriate *intermediate* objectives of competition policy. Increasing private sector investment is the intermediate objective associated with the first perspective (recall the writings of Singh); whereas export competitiveness could motivate the second perspective. Even if one accepts the intermediate objectives of each perspective as legitimate, one is entitled to ask whether constraining competition is the policy response the most effectively meets these objectives. For example, what is the empirical and theoretical support for the contention in a developing country setting that restraining competition to bolster investment is *more effective and less costly* than offering firms an

investment subsidy or tax credit, or taking measures that encourage banks to lend to firms? Unfortunately, this line of questioning has not received the attention it deserves in the existing literature.

III.2. Complementarities between inter-firm rivalry, competition law, and economic development.

Proponents of the view that rivalry between firms can improve national economic performance over time have pointed to a wide range of circumstances under which competition contributes to innovation, productivity, and growth. Since the appropriate enforcement of competition laws can promote inter-firm rivalry, the five perspectives described below highlight the important contribution that the appropriate enforcement of competition law can make to development.

First, greater competition between firms is said to encourage managers and capitalists to focus on improving their enterprise's performance so as to maximize profits or at least to stave off the threat of bankruptcy, take-over, or some other loss of control. One of the United States' leading jurists in the early twentieth century, Judge Learned Hand, once observed that:

> "Possession of unchallenged economic power deadens initiative, discourages thrift and depresses energy…Immunity from competition is a narcotic and rivalry a stimulant to industrial progress."[18]

[18] United States v. Aluminum Co. of America,148 F.2d 416, 427 (2d Cir. 1945).

The propensity of firms to attain the minimum level of costs subject to a given level of output and the circumstances in which they are most likely to do so has been extensively debated by economists (see, for example, the differing views in Leibenstein 1966, Stigler 1976, and Leibenstein 1978.) One interesting feature of this debate is the finding that more intense competition in product markets tends to intensify the pressure on firms to lower costs (see, for example, Primeaux 1977 and Leibenstein 1978). Consistent with this view, in a major survey of the impact of regulatory reform across a wide spectrum of U.S. industries, Winston (1998) found that introducing competition into previously-regulated industries significantly strengthened the efficiency of firms and improved economic performance over time.

The view that inter-firm rivalry provides incentives for efficiency-enhancing restructuring also finds considerable support in the empirical literature on the enterprise reform in Eastern Europe and the members of the Commonwealth of Independent States (CIS). Fortunately, a detailed survey of the literature on the determinants of the pace of restructuring in transition economies has recently been published (Djankov and Murrell 2002). This survey includes a critical discussion of 54 analyses of the impact of product market competition on the rate of firm restructuring and what is especially appealing is that it uses objective measures to assess the quality of the research papers being reviewed. Djankov and Murrell find that:

> "The analyses indicate that product market competition has been a major force behind improvements in enterprise productivity in transition economies as a whole…" (page 43).

They also note that their:

> "…results are upheld in a survey of over 3,300 enterprises in 25 transition economies (Carlin *et al.* 2001) that shows strong positive effects of the reduction in market concentration on firm efficiency" (Djankov and Murrell 2002, page 44).

Another striking finding the Djankov and Murrell survey is that, in contrast to their findings with respect to the importance of competition in domestic markets, competition from imports is a far less robust determinant of beneficial restructuring. Djankov and Murrell state that:

> "The findings on the effect of import competition deserve special attention. In the CIS, import competition has a large negative effect in economic terms, although this effect is statistically not robust. In Eastern Europe, import competition has a positive effect in economic terms, but the results of individual studies are mixed, consistent with the literature on developing economies" (Djankov and Murrell 2002, page 44).

This suggests that measures to promote rivalry among domestic firms tend to have a more consistent effect on restructuring—and on dynamic economic performance—than trade liberalization. Therefore, according to this perspective it would be imprudent to rely solely on lowering trade barriers to discipline entrenched market power and to provide sharp incentives to firms to keep costs under control.

A *second* source of complementarity between the competition law enforcement and long-term economic performance is provided by the long-standing contention that the intended benefits of trade reform may not be realized without active enforcement of competition law. The concern here is that reductions in official trade barriers will be replaced by anti-competitive private practices, the latter counteracting the price-reducing effects of trade reforms. To the extent that reductions in the prices of imported machinery and other

capital equipment bolster investment and enhance dynamic economic performance, then reductions in trade barriers on these durable goods may not translate into higher growth without measures to discipline private anti-competitive practices. The enforcement of competition law, therefore, increases the effectiveness of cuts in trade barriers on growth-enhancing imports.

The general point that the objectives of trade reform can be frustrated by anti-competitive practices was made with considerable force in a contribution by Argentina to the WTO's on the Interaction between Trade and Competition Policy in 1998. The contents of this contribution have been summarized as follows:

> "In a recent contribution to the Group (document W/63), Argentina has set out the results of 18 empirical case studies which, in its view, illustrate the importance of an effective national competition policy, even in the context of external market liberalization. The presumption underlying these studies is that, in general, when a country implements far-reaching trade liberalization, domestic prices will tend toward import parity levels. The competition agency of Argentina had, nonetheless, identified several situations where this response had not been forthcoming, due to the existence of anti-competitive practices of enterprises. Factors that tended to facilitate or underlie such anti-competitive practices included high market concentration levels, inelastic demand (reflecting a lack of substitutes), the prior existence of a cartel, and control by a dominant enterprise of scarce facilities that were necessary for imports to occur. Based on these findings, the representative of Argentina concluded that effective national competition policies are vital to ensure that the process of adjustment to external liberalization and resulting benefits for efficient economic

development are not circumvented by anti-competitive practices" (WTO 1998, page 13).

A *third* source of complementarity between competition law and dynamic economic performance involves direct foreign investments. In particular, the appropriate enforcement of competition law both enhances the attractiveness of an economy as a location for foreign investment and is important to maximize the benefits that flow from such investment.[19] A synthesis paper on the relationship between competition policy, trade policy, and development reported on the following pertinent discussions in the WTO's Working Group on the Interaction between Trade and Competition Policy:

> "The point has been made in various oral and written contributions to the Group that the implementation of a transparent and effective competition policy can be an important factor both in enhancing the attractiveness of an economy to foreign investment, and in maximizing the benefits of such investment. More specifically, these contributions have suggested that competition policy can enhance the attractiveness of an economy for foreign investment by providing a transparent and principles-based mechanism for the resolution of disputes involving such investment that is consistent with international norms that are widely-accepted internationally. This increases investor confidence and therefore the propensity to invest. Vigorous competition in markets, reinforced by competition policy, also helps to maximize the benefits of such investment to host countries, by encouraging participating firms to construct state-of-the-art production facilities, to transfer up-to-date technology into

[19] Such an argument is developed, for example, in UNCTAD (1997) and in references contained therein.

host countries and to undertake appropriate training programmes, and by preventing the exploitation of consumers" (WTO 1998, page 8).

It has also been argued in the Chinese and Indian country studies in this book that the failure to effectively enforce competition laws against certain foreign firms has reduced the benefits accrued from certain foreign direct investments.

A *fourth* set of complementarities arises from the substantial body of research into the effects of greater competition in the product market on the incentives for firms to innovate. Comprehensive surveys of the latter can be found in Ahn (2002), American Bar Association (2002), and Anderson and Gallini (1998). Leading economic researchers have explored the following three distinct channels through which competition in product markets stimulates innovation:

"-Darwinian effect: Intensified product competition could force managers to speed up the adoption of new technologies in order to avoid a loss of control…due to bankruptcy (Aghion *et al*. 1999). More generally, firms should innovate to survive under competitive pressure (cf. Porter, 1990)."

"-Neck-and-neck competition: In a simple model of "creative destruction" the incumbent firms unlike new entrants have no incentive to innovate. Under a more gradualist technological progress assumption with incumbents engaged in step-by-step innovative activities competition could increase innovation. It is because more intensive product market competition between firms…will increase each firm's incentive to acquire or increase its technological lead over its rivals."

"-Mobility effect: In the learning-by-doing model of endogenous growth, the steady state rate of growth may be increased if skilled workers become more adaptable in switching to newer production lines…In this case, more competition between new and old product lines will induce skilled workers to switch from old to new lines more rapidly (Aghion and Howitt, 1996)" (as summarised in Ahn 2002, page 7).

Ahn (2002) offers the following summary of the evidence[20]:

"Competition has pervasive and long-lasting effects on firm performance by affecting economic actors' incentive structure[s], by encouraging their innovative activities, and by selecting more efficient ones from less efficient ones over time" (page 5).

By contrast,

"The claim that market concentration is conducive to innovation does not appear to be supported by recent empirical findings…On the whole, however, there is little empirical support for the view that large firm size or high concentration is strongly associated with higher levels of innovative activity" (page 5).

A *fifth* particular channel through which competition law enforcement can contribute to dynamic economic performance is highlighted in the mushrooming literature on so-called "innovation markets," a term introduced by Gilbert and Sunshine (1995). This literature emphasizes that innovation itself is a result of market interactions and that even firms that are not currently competing with each other in actual (existing) product markets may be competitors in markets for future innovations. Furthermore, competition in such markets

[20] See Table 1.1 and section IV.1 of Ahn (2002).

(and hence the incentive for innovation) can be undermined by mergers or other (potentially) anti-competitive practices.

This perspective has become sufficiently influential that, in the U.S., the federal agencies responsible for conducting merger reviews have explicitly incorporated concerns about "innovation markets" into published enforcement guidelines dealing with matters such as intellectual property licensing issues[21] and have sought to block corporate mergers on the basis of the threat they would pose to incentives for innovation.[22] Although some analysts (Gallini and Trebilcock 1998) have argued that the more conventional theory of "potential competition" already encompasses the principal insights stressed by the conception of innovation markets, at a minimum, the latter further illustrates the scope for anti-competitive practices to undermine the incentives for innovation, and hence the positive contribution that competition policy can make to long run economic performance. At a minimum this argument qualifies the Schumpeterian view that unfettered firms will maximize the degree of innovation of new products and processes. The innovation markets literature reminds us that some firms have the incentive and the means to stall innovations by others.

This subsection has highlighted five ways in which inter-firm rivalry, which can be bolstered by the appropriate enforcement of competition law, has positive payoffs for economic development. Those payoffs are not confined to lower prices, but include greater innovation and more opportunities for private sector development in emerging markets.

[21] See, for example, the Intellectual Property Guidelines published by the United States' Department of Justice and the Federal Trade Commission in 1995, especially section 3.2.2.
[22] See Gilbert and Tom (2001).

IV. Concluding remarks.

After stating the various ends and means of competition law and competition policy, an evaluation of the principal arguments concerning the relationship between inter-firm rivalry, competition law, and economic development was presented. The four following arguments have been advanced to question whether unfettered rivalry between firms promotes development:

1. Missing markets, especially financial markets, imply that investments can only be financed out of retained profits, which are eroded by unfettered competition between firms.

2. Firms, it is argued, need to achieve a certain size to compete effectively on world markets or to withstand competition from imports. This view has clear implications for the conduct of reviews of proposed mergers and acquisitions, especially in those sectors where so-called national champions currently, or might in the future, operate.

3. Governments need not intervene to promote rivalry in markets where innovation is the principal source of competition. In such markets current monopoly profits act as a spur to innovation and the creation of new products and processes.

4. Maximizing rivalry leads to inefficient outcomes in national monopolies and in some network industries.

The following five arguments contend that promoting rivalry between firms enhances dynamic economic performance:

1. Greater competition between firms sharpens incentives to cut costs and to improve productivity.

2. The benefits from trade reform, deregulation, and privatization will not be realized without the potential for active and effective enforcement of competition law.

3. The appropriate enforcement of competition law adds transparency to a nation's commercial landscape which, in turn, attracts foreign direct investment.

4. Greater competition in product markets stimulates both product and process innovations.

5. Rivalry in the market for future innovations can be protected by the active and appropriate enforcement of merger and acquisition laws which prevents, for example, one firm taking over another firm which has a potentially strong, but not as yet fully developed, range of rival products.

The conceptual and evidential material presented in this chapter strongly suggests that innovation, productivity improvements, and other forms of long term economic performance, are likely to be promoted rather than impeded by inter-firm rivalry and, therefore, by the enforcement of competition laws that promote such rivalry. Nonetheless, it is also apparent from the literature that specific situations can be identified—principally relating to the technologies available to firms in an industry—where the maximization of either the number of competitors in a market or the degree of competition between firms may lead to inefficient outcomes. It should be stressed that according to the thinking of leading scholars in the field of industrial organization (see, e.g., Carlton and Perloff 1994) such situations do not call for the wholesale rejection of competition law as a tool of economic governance; rather, they call for appropriate tailoring of the application of such law to take account of relevant technological and other considerations.

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