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Old and new ideas in competition policy

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Old and new ideas in competition policy

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Abstract

This paper reviews the evolution of competition policy during the 20th century. It identifies the major principles underlying these policies and shows that two major challenges will have to be faced in the near future. On one hand, the technological changes introduced by the so-called ‘new economy’ are rapidly replacing some old rules, by reshaping the concepts of monopoly power and market dominance. On the other hand, internationalisation of economic boundaries is creating a greater need of policy coordination, not only between the US and the EU, but a global level as well. These ideas will define the evolution of competition policy in the next decades.

Resumen

Este artículo revisa la evolución de la política de defensa de la competencia durante el siglo veinte. Su objetivo es presentar los principios básicos de dicha política e identificar los principales desafíos que deberán ser abordados en el futuro. Por un lado, el cambio tecnológico introducido en la denominada “nueva economía” obliga a reemplazar algunas reglas tradicionales, redefiniendo los conceptos de monopolio y poder de mercado. Por otro, la internacionalización de la economía genera la necesidad de una coordinación global de las actuaciones de las agencias de la competencia y no sólo entre EE.UU. y la Unión Europea. Estas dos ideas definirán la evolución de la política de defensa de la competencia en las próximas décadas.

Keywords: Competition policy, new economy, international coordination

JEL Classification: L4, B0.

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1. Introduction

At the beginning of the 21st century most economic policies have dramatically changed when compared to what they used to be just a century ago. Trade policies, for example have evolved from the protectionist measures in fashion prior to the World War I to the generalised liberalisation and free trade proposals nowadays advocated by the WTO and other regional trading blocs. Another example is given by regulation policies, particularly in the last twenty years, when increasing private participation in infrastructure sectors and utilities across Europe, Latin America and Asia have challenged the traditional role of the Government in this sector.

Competition policy follows a similar pattern. Its solid foundations in the early writings of political economists such as Adam Smith, David Ricardo or Alfred Marshall, have suffered during the 20th century a major reinterpretation. The main principles have not changed, but the ways they can be used to affect market behaviour have been reshaped by the economic history of the last century. At the same pace that antitrust issues have become increasingly complicated, new technologies have revolutionized many productive processes creating new economic relationships among firms and customers. Politics is now spread everywhere and social issues are high in the agenda.

Historically, most underlying ideas in competition policy can be traced back to medieval times. In fact, a great part of medieval industry was a system of organized monopolies, endowed with a semi-public status, watched with jealous eyes to see that they did not abuse their powers against the dominant class. But the modern history of competition policy takes shape only during the later decades of the 19th century, when a free trade era was replaced by a stance of protectionist trade policy under the umbrella of which cartels and trusts began to proliferate. Whereas in the US the political response was antitrust, in Europe cartels developed mostly unimpeded. It was only after World War II that competition policy was introduced in Europe, particularly in Germany, Britain and later, at the European Union level (Neumann, 2001).

Since then, a remarkable convergence of principles and practices of competition policy has emerged in the last decades. Globalisation of economic relationships has given rise to interdependencies which require a unified approach to face restraints of trade across national boundaries caused by collusion and mergers. Furthermore, the body of theories

pertaining to what it is called ‘industrial organisation’ has progressively achieved consensus over certain standards and models, which have been subsequently transposed to the legal tradition of individual countries.

In this paper we discuss the recent evolution of competition policy reviewing these changes with some detail. After this introduction, Section 2 examines the traditional principles and objectives of competition policy. We then turn in Section 3 to briefly describe the historical development of competition policy, particularly in the US after the passing of the Sherman Act. In Section 4 we extend this analysis to study how the new economy, particularly the recent developments of information technology, is reshaping the application of these policies everywhere. Section 5 compares the US and European Union approaches to competition policy, whereas Section 6 concludes with a consideration about the internationalisation of competition policy.

2. The traditional approach to competition policy

Competition policy is a cornerstone of economic policy in any market economy founded on well-defined property rights and freedom of contract, and supported by policies aiming at stable money, high level of employment and social security. However, the objectives and means of competition policy have not always been openly defined and have been subject to several controversies. On one side there are ardent followers of the principles of economic freedom as exemplified by the slogan ‘laissez faire, laissez passer’. They consider economic freedom and the ensuing competition as ends in themselves. On the other side, there are those considering competition policy as a constituent part of an intervention-prone industrial policy aiming at establishing market structures and enticing enterprises to behave in a way conducive to the enhancement of economic and social welfare.

2.1. Objectives of competition policy

Within this range of diverging opinions four main objectives to be pursued by competition policy may be identified. The first one is to establish a competitive order as an end in itself to safeguard economic freedom. The second is to maintain this competitive order to foster economic efficiency by means of technological and economic progress. The next one is to provide for a framework of fair competition, which implies prohibition of deceptive and fraudulent practices, threat, extortion and blackmail, as well as unfair advantages through

government subsidies. The final aim is to maintain a decentralized structure of supply because small and medium-sized enterprises are considered as the backbone of a democratic society.

Although these objectives have been traditionally pursued by competition policy in the market economies during the last decades, some of them are rivalrous while others are mutually supportive. The economic development during the last third of the 19th century gave rise to the conclusion that a laissez-faire stance of economic policy would lead up to undermining a competitive order by the formation of trusts and cartels, and thus to the eventual elimination of economic freedom. Therefore maintaining a competitive order by prohibiting any restraint of competition was deemed as an objective to be pursued irrespective of the impact on economic efficiency. It was thus considered that a precondition for a successful market economy was the existence of an effective competition policy (Kovacic, 1992).²

The increasing complexity of economic activity has apparently weakened this compromise. Whereas cartels have overwhelmingly been assessed critically, the attitudes towards mergers and international market power are more ambiguous. In particular, recent mega-mergers in telecommunications, energy and banking sector have given rise to both concern and admiration.³ Since mergers affect the interests of different people in different ways, competition policy has been subject to political controversies when apply to issues where 'national interest' is at stake. On one hand mergers and the formation of giant firms are welcomed as allegedly enhancing international competitiveness, and on the other hand the political clout they may wield gives rise to serious concern. The enlargement of markets following globalisation seems to require firms to grow in size in order to withstand the challenge of more vigorous competition. Frequently, however, competition is visualized as a zero sum game holding the promise of large gains for a few and losses for

² The need for such a policy was recognized – in a classical quotation – by Adam Smith when he wrote in *The Wealth of Nations* in 1776: 'People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public or in some instances to raise prices.'

³ Several authors have found a parallelism between the recent mega-mergers in telecommunications (for example AOL and Time Warner in 2000 or Hewlett-Packard and Compaq in 2002) and the antitrust issues that preceded the Sherman Act in the US.

many. The mixture of opposing views has engendered a demand for redefined role of competition policy based on a more case-by-case basis.

2.2. The future role of competition policy

In view of these controversial attitudes and uncertainties regarding the appropriate role of competition policy economic expertise is called for. Whilst at the end of the 19th century legal arguments had taken the lead, more recently the debate has become more heavily influenced by economic reasoning, trying to understand the true nature of markets. As many writers since Adam Smith have recognized, the problem is that markets can be manipulated to give some of those involved greater economic power so that competition is distorted and economic efficiency impaired.

Moreover, economics is not everything. There may also be ethical and social objections to the absence of competition: it is simply not fair that large firms or cartels should be able to oppress smaller competitors and/or customers by charging prices that greatly exceeds the cost of supply. Alternatively, there may be a commitment to competition as the appropriate form of economic organisation, either because competition is good in itself, or because it delivers the goods.

Following Hay (1993), the principles that encompass all these views, possibly underlying a new role for competition policy in the near future, can be summarized into four major ideas:

1. The role of competition is still to promote economic efficiency. Although this goal could be enriched by alternative views of the matter – such as that competition policy should be also guided by some broader notion of the public interest, including perhaps non-economic social objectives – the growing consensus is that the main contribution of economists should be the focus on economic efficiency, as a reference benchmark.
2. The second principle is that economic analysis is generally ambiguous *a priori* about the efficiency effects of particular market structures and conduct. This proposition builds on the considerable advances in industrial organisation of the last 15 years, which have enabled theorists to identify the policy issues raised by a wide range of market phenomena. New tradeoffs, due to changes in technology and consumer-

producer relationships are more or less ubiquitous, and only in a few cases is it possible to reach an unambiguous verdict.

3. The third principle is that the appropriate design of policy and policy institutions is crucial to a successful competition policy. In particular, given the ambiguity of economic analysis, policy has to identify rules or presumptions to indicate the boundaries between acceptable and unacceptable market conduct and structure, but it has to offer at least some scope for the parties involved in such cases to argue countervailing efficiency benefits. Institutionally, implementation of policy requires an open procedure, non-discriminatory either across firms or across countries.
4. International harmonisation of competition policies is essential, and probably a supranational competition authority. This final idea is merely a consequence of the growing internationalisation of economic activity, with multinational enterprises supplying markets that extend beyond the boundaries of particular states, and therefore beyond the jurisdiction of competition authorities.

These four principles can be interpreted as the consequence of the profound changes that competition policy has gone through since its origins. In particular, the evolution of competition policy in the 20th century should be viewed as a continuous feedback mechanism. Major antitrust cases – Standard Oil, AT&T, IBM, and Microsoft, for example – have helped to fine-tune the theoretical principles laid by classical economists.

3. The evolution of competition policy in the 20th century⁴

The passage of the Sherman Act in the United States in 1890 marks the formal beginning of competition policy in the world, setting the stage for wider range of measures and instruments against monopoly, cartels, and market power abuse. The Act outlawed every contract, combination or conspiracy in restraint of trade and monopolisation, treating any violation as a crime. Among American statutes that regulated commerce, one of the salient features of the Sherman Act was its unequalled generality. Through its open-ended

⁴ This section draws on Kovacic and Shapiro (1999), which provides a detailed account of the history of competition law in the US.

wording, Congress gave federal judges extraordinary power to draw lines between acceptable cooperation and illegal collusion, between vigorous competition and unlawful monopolisation.

Most economists in the late 19th century criticised the Sherman Act. At best, the statute seemed a harmless measure incapable of halting an irresistible trend toward firms of larger scale and scope. At worst, the law would impede attainment of superior efficiency promised by new forms of industrial organisation. Few economists lauded the statute as a useful tool for controlling abusive business conduct.

Beyond envisioning large gains from economies of scale and scope, economists at this time actively debated whether unbridled competition endangered industries with high fixed costs and low marginal costs, like railroads and utilities. Some argued that government ownership was needed to enable such industries to recover fixed costs. Others, anticipating later results by Ramsey or Hotelling, recognized that price discrimination could enable firms to recover fixed costs.

Although the Sherman Act's first decades featured no whirlwind of antitrust enforcement, the courts began shaping the law's vague terms. The Act's categorical ban upon *every* trade-restricting contract required judges to develop several principles for distinguishing between collaboration that suppressed rivalry and cooperation that promoted growth. Some early cases applied such language literally, yet even these decisions recognized that prohibiting all agreements which curbed commercial freedom could imperil beneficial forms of cooperation, such as partnerships.

Progressively, the courts started to distinguish between *naked* trade restraints, where direct rivals simply agreed to restrict output and raise price, and *reasonable* ancillary restraints, which encumbered the participants only as much as needed to expand output or introduce a product that no single participant could offer. Judges also rejected arguments that price-fixing by competitors was benign because the cartelists set reasonable prices or desired only to halt an endless downward price spiral (Perelman, 1994). Early decisions also extended the suspicion of price restrictions to vertical relationships. In 1911, the Supreme Court held that a minimum resale price maintenance (RPM) agreement, by which a manufacturer compels retailers to sell its products above a specified price, was

illegal *per se*. As the courts delineated rules for collusion and cooperation between firms, they struggled in these early years to come to grips with monopoly.

Following the Standard Oil case, the passage of the Clayton Act (1914), and the creation of the Federal Trade Commission (FTC), it might seem that antitrust enforcement was about to step into high gear. Instead the antitrust system entered a period of relative repose. From 1915 until the mid-1930s, the courts relied heavily on reasonableness tests to evaluate business conduct and often treated suspect behaviour permissively. In the same era, the executive branch discouraged aggressive prosecution by the Department of Justice (DOJ) and the FTC.

The shift in emphasis had several sources. The first was ascent of the ‘associationalist’ vision of business-government relations. Experience with the War Industries Board in World War I led many economists, business leaders, and government officials to believe that the business-government collaboration that guided the wartime mobilisation provided the best way to organize the economy in times of peace. The associationalists received strong support from Herbert Hoover who, as Secretary of Commerce and as President, urged businesses to cooperate through trade associations to exchange information and ‘curb the wasteful features of competition’.

To many observers, the economic collapse in 1929 repudiated the competitive model of economic organisation and verified the associationalist preference that the government take stronger steps to orchestrate commerce. Advocates of close coordination between government and industry exercised considerable influence in designing the National Industrial Recovery Act (NIRA) and other planning experiments of the New Deal. By mid-decade, Congress imposed comprehensive controls on entry and pricing in sectors such as transportation and passed the Robinson-Patman Act (1936), which sought to prevent national retailing chains from expanding at the expense of small stores. As support for competition waned, antitrust policy receded as well.

Supreme Court decisions in this era affecting collusion and cooperation between firms reflected tolerant treatment. For example, with regard to relations among competitors, in 1918 the Court upheld limits that a commodities exchange placed on prices for after-hours trading. The Court said the restraints should be evaluated through a comprehensive inquiry into their history, purpose, and effect. This multi-factored rule of

reason might make analysis more accurate, but such an approach could require costly, time-consuming efforts to gather and evaluate information – conditions that tended to favour defendants. For practices affecting distribution to downstream firms, the Supreme Court permitted producers to announce a favoured distribution policy and ‘unilaterally’ refuse to deal with downstream firms that did not comply, thus narrowing the *per se* ban upon minimum RPM. In 1925 the Court also took a benign view of arrangements for sharing price and output data among rivals.⁵

By the mid-1930s, the economic planning models that inspired great hope early in the New Deal had lost their momentum and the Roosevelt Administration began to think that the key to economic restoration was competition. From 1936 through 1940 the Antitrust Division in the DOJ started to mount ambitious attacks on horizontal collusion and single-firm dominance. This trust-busting revival drew intellectual strength from the work of University of Chicago economists Henry Simons, Jacob Viner, and Frank Knight. Simons in particular assailed the statist assumptions of New Deal planning experiments such as the NIRA and advocated robust antitrust enforcement, including steps to deconcentrate American industry (see for example Simon, 1948). These authors soon become the champions of free markets, promoting antitrust and competition as preferable to government regulation, planning, or ownership.

The invigoration of antitrust enforcement in the late 1930s reflected both a heightened suspicion of corporate gigantism and a search for ways to simplify the legal procedures. Because the rule of reason mechanisms often entailed an indeterminate inquiry that exonerated defendants, many commentators urged courts to simplify the plaintiff’s burden of proof. Several Supreme Court decisions accomplished these shifts in policy. In 1940, for example, the Court condemned collective efforts by refiners to buy ‘distress’ gasoline produced by independents. The Court emphasized that horizontal price fixing agreements would be condemned summarily and treated as crimes, regardless of their actual effects. The Court warned that business managers who tried privately to recreate the planning schemes that government officials previously had approved acted at their peril.

⁵ This case (*Maple Flooring Manufacturers’ Association vs. United States*) holds special interest for economists today because it featured the Supreme Court’s first citation to an economist’s work in an antitrust decision, namely H.F. Stone, a former dean of Columbia Law School.

By the early 1970s, the extreme activism in antitrust law, reflected in public enforcement policy and Supreme Court decisions, had attracted harsh criticism from commentators known as the Chicago School, including legal scholars such as Robert Bork and Richard Posner. Their antecedents can be found in the work of Aaron Director in the late 1940s and early 1950s. Like Simons, the Chicago School abhorred comprehensive regulation of entry and prices. Unlike their predecessors, the new Chicago scholars emphasized efficiency explanations for many phenomena, including industrial concentration, mergers, and contractual restraints that antitrust law acutely disfavoured in the 1950s and 1960s (Thorelli, 1954).

Several economically-minded attorneys such as Bork, Posner or Easterbrook took Chicago School analytical precepts and translated them into operational principles that judges readily could apply.⁶ These commentators questioned many rules of *per se* illegality that the Supreme Court created from 1940 to 1972 and argued that some conducts, such as vertical restraints, was so often benign or pro-competitive that courts should uphold it with rules of *per se* legality.

By the mid-1970s, the perspectives of these and like-minded commentators increasingly gained judicial approval. At least two key factors accounted for this receptivity. The first was a change in judicial appointments. Many of the new appointees to the Supreme Court and the lower courts had comparatively narrow preferences for antitrust intervention. The second factor was a sense that US firms were losing ground in international markets and surrendering market share at home. This perception increased sensitivity to efficiency arguments.

Litigation over market power provided the occasion for competition policy to test its real strength. The pivotal events that would definitively mark its importance were two important cases. The first one was the decision to split AT&T into regional companies or 'baby bells' showed that the DOJ was ready to take harsh measures. However, the IBM case in the 1980s had a contradictory effect. It was extended over too many years and ended more by the technological advances in the market than by the effectiveness of the courts.

Since the mid-1990s antitrust decisions and government enforcement policy have begun to reflect the flexibility of recent analytical perspectives. The most noteworthy feature of recent cases concerning collusion or cooperation between firms is the search for manageable analytical techniques that avoid the complexity of the traditional rule of reason yet supply a richer factual analysis than *per se* tests.

In summary, economists have made two major contributions to the US antitrust regime. The first is to make the case for competition as the superior mechanism for governing the economy. Throughout the 20th century, America's antitrust laws have coexisted uneasily with policies that favour extensive government intervention in the economy through planning, ownership, or sweeping controls over prices and entry. Economists have informed the debate about the relative merits of competition by illuminating the costs of measures that suppress rivalry with the ostensible aim of serving the public interest.

The second significant contribution of economists has been to guide the formation of antitrust policy. Economic learning has exerted an increasing impact on antitrust enforcement. In the first half of the last century, one finds little direct impact of economic research on the major court cases. The influence increases in the century's second half, but usually with a lag. Today, the links between economics and law have been institutionalized with increasing presence of an economic perspective in law schools, extensive and explicit judicial reliance on economic theory, and with the substantial presence of economists in the government antitrust agencies. The availability of new data sources like electronic point-of-purchase data, the refinement of flexible game-theoretic models, and the new emphasis on innovation assures that robust arguments over the proper content of competition policy will flourish into the 21st century. In particular, technological innovation and the revolution of information technologies will probably determine this future as well.

⁶ A typical example is the so-called Areeda-Turner test used for predation. A price is considered predatory is set below short-run marginal costs. For further developments and implications see for example Tirole (1988).

4. Competition policy and the ‘new economy’

There is no doubt that technological innovation is an important feature of economic progress. Mainstream growth theories nowadays consider that traditional measures of capital and labour only explain a fraction of a society’s economic growth, concluding that technological progress is responsible for the remainder. Consequently, instead of focusing on the fact that an increase in the rate of technological change can offset the negative impact on consumer welfare from prices which are not equal to marginal cost, it is very important for antitrust policy in the new economy to be formulated and implemented in a way that promotes rather than impedes such innovation.

But, what is the ‘new economy’ and what does it include? What is generally defined as ‘new economy’ usually exhibits two basic characteristics: it has very high rates of innovation, and its main output is intellectual property. While the traditional industries are often characterized by multi-plant production, stable markets, heavy capital investment and infrequent entry and exit, new economy firms are characterized instead by large investments in intellectual property; economies of scale in production (that is, falling average costs as output increases), economies of scale in consumption (referred to as network effects). In addition, some industries in the new economy are also described by bilateral markets (i.e., at software market, the more firms to development applications, the more customers buy, and vice versa) and by competition *for* the market instead of *in* the market. In these cases, competition to obtain a monopoly is an important form of competition. The more protection from competition the firm that succeeds in obtaining a monopoly will enjoy, the more competition there will exist to become that monopolist (Posner, 2000).

Although there are different industries classified under the term ‘new economy’, the most important are mainly four: manufacturing of computer software, Internet-based businesses (including access, service and content providers), communication services and equipment designed to support the first two markets and, finally, biotechnology and pharmaceuticals companies, which have in reputation their network effects over customers. All these industries need intellectual property to grow and expand, which is achieved by investing heavy fixed costs in R&D (relative to marginal costs of production, once the innovation is implemented). Without legal protection (patents or copyrights), the creator of intellectual property has not incentives to develop it (free riding behaviour does not allow

to recoup his investment), but it may operate to deflect consumers to more costly substitutes. For this reason, the perfect competition textbook model does not apply to many new economy markets.

Market structure in new economy industries is usually characterized by vertical integration as a common feature. They all are ‘winner-take-most’ markets, where there is extreme market share (with a natural trend to concentration) and profits inequality, and where the addition of new competitors, even under conditions of free entry, does not change the markets structure in any significant way. This is the natural equilibrium in markets with network externalities and incompatible technical standards (Economides and Flyer, 1998).

In addition, there are important switching costs when a consumer wants to change to alternative products (software updates, for example). Many firms in new economy industries enjoy a ‘first mover advantage’: it is very important to innovate and introduce the innovation in the market, in order to set the standards and sell the first product that customers adopt. Nevertheless, competition between firms would be able to break down the ‘vicious circle’ of *innovation – economies of scale in production and consumption – switching costs – customer’s fidelity*.

According to Hahn (2001), a competition-relevant feature of new economy industry is how the pricing strategies of the firms are. If a company wish to have a dominant position in the market, it will have to charge a low price, so that it can attract customers. Then, unless it maintains a high rate in innovation and a large customer base, it can not to charge the profit maximizing price obtained from a static analysis. However, the application of competition law to new economy firms is not so simple. In general, two general approaches can be identified: interventionists vs. non-interventionists.

The advocates of the first approach are particularly concerned about possible barriers to entry that could be imposed by a dominant company, through exclusive contracts with distributors or by ‘tying’ products together. They also like to cross-examine in courts the internal behaviour of companies. In the recent Microsoft case for example, the plaintiff pointed to a variety of internal documents to argue that the firm’s motive in developing its Explorer browser was to crush its competitors, but the evidence to prove the real motivation is sometimes more problematic. Microsoft’s legal advisers replied that new

economy is a ‘winner-take-most’ market, where one company’s success is built on the failure of another. Thus, although its strategy appears to be predatory, it is argued that it actually benefits consumers by lowering prices in both the short and long term.

The second approach is represented by well-known authors as Schmalensee or Varian. They focus on the measurement of dynamic competition, giving less importance to market share and mechanical definitions of markets. It is recognized that some activities traditionally viewed as anticompetitive could be good for consumers, and they believe that firms that lose in the marketplace are increasingly using antitrust to confound and raise their rivals’ costs. They argue for examining new economy on a case-by-case basis, giving the dominant company the benefit of the doubt. This is similar to a ‘laissez faire’ approach, where intervention should be resisted unless there are good reasons to believe that the remedies would do more good than harm.

The institutional structure of antitrust enforcement is also becoming a problem: technological lack of knowledge of judges and jurors, nor neutral components, and what is more important, law time is not real time (i.e., there is a mismatch between law time and new economy real time). This reason – the fast pace of change in the new economy compared with the slow pace of antitrust proceedings, as it happened in the IBM case – is troubling in two respects: first, an antitrust case involving a new economy firm may drag on for so long relative to the changing conditions of the industry as to become irrelevant (similarity with old economy); second, even if the case is not obsolete, its tendency may cast a pall over parties to and affected by the litigation, making investment riskier and complicating business planning.⁷

The most relevant case of antitrust and the new economy is the Microsoft case, which has become the banner advertisement for the new focus of antitrust enforcement of innovation. In this case, DOJ and 19 states sued Microsoft on the main charges of: (i) monopolisation of the market for operating systems of personal computers and anti-competitive actions to illegally maintain this monopoly; (ii) attempt to monopolize the market for Internet browsers because such browsers would create competition for operating systems; and (iii) bundling its browser with Windows (Economides, 2000).

⁷ As pointed out by Posner (2001), these problems are aggravated by the tendency of antitrust litigation to create several lawsuits out of a single dispute. See also Malerba *et al.* (2001)

Although Microsoft was found guilty and a District Court Judge ordered the break-up of the company into two separate firms, in March 2002 the company reverted this penalty by achieving an agreement with DOJ and most states.

But the Microsoft case is not the only connection between competition policy and the new economy. For example, both the DOJ and FTC have expressed their concern about other cases, particularly those related to merger in the telecommunication industry. Recent examples are the MCI and WorldCom, investigated by the European Union for possible abuses of dominant position, or the AOL-Time Warner and Vodafone-Vivendi cases, where many of the issues of the Microsoft case have been revived.

In summary, the new economy has had a notable influence on competition policy. The major impacts can be summarized into the following implications:

1. First, a high market share is no longer necessary equivalent to market dominance. It is necessary to bear in mind that there is a 'Schumpeterian' process of creative destruction, investigating whether there is (or not) high competition in concentrated markets, where a very high pace of design and innovation simultaneously happens. In the new economy innovation is as meaningful as price and there are dominant positions only if firms are able to set very high prices and, at the same time, control the investment in R&D. Technological change and new emerging activities compel to review market development and update the criteria of assessing cases. The definition of the relevant product and service markets and their geographical scope is a key element in this respect, as it will determine the application of both regulation and competition law.
2. Whether a firm hurts to a competitor is not always a proxy of antitrust behaviour or harm to consumers: a more general overview is needed, taking into consideration short and long term effects. Sometimes there are short term barriers to entry, but entry is favoured in the long term. While investment raises these barriers, technological convergence tends to reduce them.
3. If there is complementary in consumption and production, integration and bundling would be efficient. For this reason it is difficult to determine whether there is a predatory behaviour, because of competition to obtain the market, concentration level, differentiated products, risk to finance R&D projects, etc.

4. Finally, as a legal approach, changeable and unknown sector obligates to not to forbid per se. The best approach to real competition policy in these cases is to concentrate in real harm to consumers, such as price increases or slow innovation paces by both incumbent and new firms.

Let us see now how different is the approach to new and old economy competition issues both in the US and the EU.

5. The European vs. the American approach

It was only after World War II that competition policy was introduced in some countries, particularly in Germany and Britain, and after the Treaty of Rome (1957), at the European Union level. This different timing provided the opportunity for Europe to build on the American experience, but its own history has also created the need to introduce a particular approach.

In principle, there seems to be a lot in common between competition policy in the US and in Europe, since they are both based in the same objectives described in Section 2 above. In accordance to the Sherman Act, articles 85 and 86 of the Treaty of Rome strictly prohibit any kind of agreement that distorts competition, as well as price-fixing practices, and abuses of dominant position. This is so because the US and EU competition systems share the same general goal: ensure effective competition between firms and protect free and fair trade in a market economy in order to improve the welfare of consumers, as the final target of competition policy. However, the institutions and the traditions are different, and so is the perception of the players. Some companies, for example, see the Competition Directorate-General of the European Commission, based in Brussels, as an ideal forum to defend themselves from the unfair competition of national rivals and a chance to overcome the restrictive rulings of local authorities.

5.1. Theoretical and empirical resemblances

As it has been described above, US competition policy has matured through different stages in the course of its history. Since the EU's tradition is much shorter, the European competition policy has been soundly influenced by US-based definitions, mechanisms and procedures over antitrust and market power. This influence has contributed to ensure that

nowadays both areas share similar goals, and have many resemblances in the way in which they are pursued and enforced.

Consider for example, vertical relationships. As we know, vertical mergers are a type of mergers between companies operating at different levels of the same production or distribution channels. This practice may exacerbate barriers to entry in a market, thereby contributing to its foreclosure for new competitors. The comparison of specific cases in this issue, considered in parallel by both the EU and US authorities, shows that their theoretical approach is quite similar (in definitions, rules, empirical tests, etc.), as a natural consequence of the fact that the history of merger regulation in the US is 90 years older. One recent case examined by both the European Commission and the Federal Trade Commission is the merger between AOL and Time Warner in 2000. This transaction was scrutinized on the same theoretical principles by both sides and was subsequently approved, after following the acceptance of substantial commitments from the merging parties.

Similar attitudes between the European Commission and the DOJ are found in the prosecution of cartels: price-fixing practices, market-sharing agreements, pre-bidding concurrence, etc. In the United States these practices are considered illegal *per se*, and they are treated with exceptional severity. Comparable legislation against cartels is in force in the EU (Article 85, section 1), although there are several exemptions that do not apply in to US firms (e.g., rationalisation at the European level of cartels with structural excess capacity).

Regarding enforcement, an important common instrument used to ensure the effectiveness of the legal prosecution is the leniency programme, which offers immunity against antitrust charges to informers and collaborating enterprises. It was adopted by the European Commission in 1996,⁸ based on US Corporate Leniency Program (1993). In the last three years, companies have applied for and obtained complete or partial amnesty from prosecution at a rate of more than one per month. An example is provided by the recent case of the ‘cartel of vitamins’. In this process, started in 2001, the European multinational Aventis accused some of its major rivals (and former cartel-colleagues) of price-fixing

⁸ Since July 2001, the program has been changed to achieve greater transparency, predictability and to enhance the incentives of potential informers.

practices, breaking a secret deal it used to participate in. European Commission convicted the firms and imposed a huge fine to the cartel (with the exception of the insider, Aventis).

5.2. Theoretical and empirical differences

In spite of the above mentioned coincidences, there are also several differences between the European and American approaches. Following Evans *et al.* (2001), at least three major divergences can be identified regarding the uniqueness of objectives, the procedural differences, and the role attributed to economic analysis.

Although both EU and the US seek after the same goals, EU competitive law focuses more on the integration of its member states' markets. Its central goal is more the prevention of national or private restraints that may re-erect trade barriers removed by EU membership than on promotion of market efficiency *per se*. Also above economic efficiency is often the protection of the rights of small and medium-sized firms to compete internationally in non-distorted markets. The United States – not facing the same market integration problems – has become more concerned with efficient market operation. Thus, economic efficiency is not the only consideration motivating competition policy in the EU. A typical example (an also a major difference between two approaches) is the maintenance of mechanisms to control unfair public subsidies in Europe, which represent around half of EU enforcement activity. When a member state offers subsidies to rescue firms in economic difficulties, or to attract investment, or to finance government-owned firm in competition with private rivals, competition is distorted and trade within the union may be damaged.

A second difference is enforcement: in the EU it is far more bureaucratic than in US. Even though in many areas the contents of EU regulation may be similar to the standard of US statutes and guidelines, enforcement in the EU to date has been much slower. The US procedure emphasizes the adversarial character of proceedings and the necessity of separating the investigation phase from the resolution phase, mechanisms that are not fully exploited in the EU (Fox, 1997). Therefore, the EU solves fewer cases than US for any given period. Particularly in merger control, there are procedural differences between both review systems: while the European Commission can approve or disapprove of a transaction by making an administrative decision within strict deadlines, the US antitrust agencies must prosecute a merger in court, within a somewhat more flexible

timeframe, if they consider that it is likely to give rise to competition concerns. The level of enforcement also differs: antitrust practices are commonly treated with criminal sanctions in US, while in the EU cartel enforcement is understaffed.

Finally, the importance of economic analysis is another difference between US and EU competition policies. Microeconomic arguments play a central role in antitrust matters in the US, whereas economic analysis is important in EU competition cases only to the extent that it can prove a direct effect on the broader purpose of the Treaty of Rome, namely market integration. As a consequence, efficiency concerns, though important to the goal of integrating the EU economies, figure less prominently in European enforcement efforts than in the United States.

A very important question which is starting to be discussed is whether these differences have influenced or not the final outcome of particular cases. The answer seems to be affirmative, since there are a growing number of cases that have been solved in different ways, and not only regarding merger issues. For example, industrial economics defines predation as an anticompetitive strategy intended to injure competitors by lowering prices, practicing strategic exclusion, or forcing rivals to bear costs that the predator does not incur itself, thereby enhancing or entrenching its market power. A definition of unacceptable predatory behaviour has been far more controversial in US than in EU legal systems. To prove the existence of predation, US courts require evidence that the defendant charged prices below reasonably anticipated marginal cost (or average variable cost, using the Areeda-Turner test). But even if this actually happens, some courts have concluded that there can be no predatory pricing if actual or potential rivals are so numerous that a predator would not be able recoup its investment in low prices after some or all existing rivals are eliminated. On the other hand, the European Commission employs a different standard for this practice. It does not consider these two tests and focuses instead on the problem of eliminating or disciplining a competitor in contrast with US jurisprudence. This reflects the idea that legal protection against a competitor's low prices is likely to be costly to consumers, who are denied the advantage of low pricing.

But one of the most divergent cases solved by US and EU antitrust agencies is the recently merger of General Electric and Honeywell, blocked by the Commission although previously the DOJ had given its clearance. A conglomerate merger raises efficiency concerns when it makes possible that the merged entity leverages its market power with the

object to foreclose one or several markets from effective competition. These practices may substantially reduce consumer's choice and ultimately lead to higher prices and a loss of welfare (Monti, 2001). In general, there are two types of mergers: those leading to price reductions that are the result of strategic behaviour on the part of a dominant firm, the purpose of which is to eliminate or marginalize competitors; and mergers which will objectively lead to significant efficiency gains, that are likely to be passed on to the consumer. European justification for its decision in the General Electric case was that when the merging parties do not provide a clearly articulated and quantified defence in terms of efficiencies, it is much harder for an antitrust authority to clear a transaction that is likely to lead to foreclosure effects.

5.3. Towards convergence?

Since the United States and Europe together account for over 60 per cent of the world's total gross domestic product, their economic policies – including their competition policies – affect the economic well-being not just of their own citizens, but of other people everywhere. Convergence between these two areas is not only desirable, but also a necessary factor for economic and political stability.

In recent years several mechanisms to reduce the above discussed differences and in order to find a consensus over competition issues have started to be implemented. The major areas of convergence between US and EU are connected with merger control procedures and remedies, antitrust policy and, one of the most important, bilateral cooperation for information exchange. During the last decade, for example, the EU has implemented a new legal framework for the application of competition rules both to distribution agreements and to cooperation agreements among competitors, which represents a considerable convergence between both law and practice. Moreover, Brussels has adopted a Notice Setting Guidelines on remedies in merger cases, which has been influenced by previous FTC studies on divestiture processes.

The increasing convergence between both approaches to competition policy has had two general consequences. First, it has made cooperation among competition authorities easier. Second, it has allowed firms to devise worldwide cooperation agreements with the confident expectation that they will be evaluated in similar way in both United States and Europe.

Both the US and EU have realised that in a globalising world, an efficient competition policy is not possible without cooperation between them. Therefore, they have concluded two far-reaching cooperation agreements during the 1990s. Since then, staff level contacts have become a daily routine in the work of European Commission and the antitrust agencies of the US. Cooperation now includes two major activities. First, there are procedural benefits such as sharing information, reducing the scope for misunderstandings, etc. The second type of issue is convergence on substantive issues, particularly market definition, assessment of competitive effects and the appropriateness of possible remedies. As a consequence of this, in October 1999 it was created a EU/US Merger Working Group whose role is to enhance transatlantic cooperation in ‘global mergers’. Nevertheless, this remarkable convergence between two sides of Atlantic Ocean is quite recent and cases like General Electric and Honeywell merger show that there remain some differences between them.

6. Towards an international competition legislation

In this paper we have reviewed the evolution of competition policy during the 20th century, particularly in the US and Europe. The analysis has been useful to identify two major sources of change to be addressed in the near future by this policy. On one hand, the technological developments associated to the so-called ‘new economy’ are rapidly redefining some old rules, by reshaping the concepts of monopoly power and market dominance. On the other hand, internationalisation of economic boundaries is creating a greater need of policy coordination, not only between the US and the EU, but a global level as well. The response to these challenges will delineate the evolution of competition policy in the next decades, and will be probably affected by a growing pressure towards the harmonisation of international competition legislation.

There are over 90 countries today that have enacted some form of competition law regime, many of which have only been introduced during the past decade. Given the ever-increasing integration of the world economy, and the consequent increasing interdependence of national and regional economies, there is a clear need to go beyond bilateralism and to reinforce multilateral efforts to ensure convergence and coordination between the growing numbers of competition enforcement systems. After identifying the need for enhanced governance mechanisms, many officials from competition authorities have voiced their support for the creation of a new and informal vehicle that will enable

antitrust agencies in all parts of the world to work together in order to improve international antitrust cooperation and sound antitrust enforcement, in an attempt to forge as broad a world-wide consensus as possible.

On October 25, 2001 – as a result of the above discussions and practical efforts – the creation of an International Competition Network (ICN) was announced publicly. National competition authorities of many countries have been involved in this project since the beginning at a high level. Despite being too early to evaluate its potential benefits, it is important to stress that it is the first time that so many competition authorities take an autonomous initiative designed to enable them to share experiences and exchange views on competition issues deriving from an ever-increasing globalisation of the world economy.

ICN will be a project-oriented, consensus-based, informal network of antitrust agencies from developed and developing countries that will address antitrust enforcement and policy issues of common interest and formulate proposals for procedural and substantive convergence through a results-oriented agenda and structure. It will encourage the dissemination of antitrust experience and best practices, promote the advocacy role of antitrust agencies and seek to facilitate international cooperation.

If the ICN complements and spreads the EU's and US efforts both within the framework of the existing bilateral agreements as well as in the multilateral level and in different forums (WTO, OECD, UNCTAD), cooperation in the area of competition will be enhanced. ICN can provide technical assistance to emerging jurisdictions that seek now to build their knowledge base, experience and institutional capacity needed to enforce domestic competition rules and negotiate multilateral ones.

Under these conditions it is likely that the ICN will be a much valued and useful cooperation project, particularly since experience shows that it takes a long time for competition authorities to be fully operational. Undoubtedly the adoption of a competition law is a good starting point, but this law needs to be complemented by reliable public enforcement. This informal initiative of antitrust agencies around the world will better handle globalisation and will put in place much needed governance mechanisms for the global markets.

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