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COMPETITION LAW AND INNOVATION

by

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Overview

Recently Microsoft lost an appeal against the European Commission, following which the American Department of Justice immediately declared that this judgment would weaken innovation. Legal action has been taken in Brussels against Rambus, Qualcomm, Intel and Google. Is European competition law standing in the way of important hi-tech firms, especially American ones ? Is it condemning acquired monopolies because of technological innovation ? Is it calling into question dominant positions founded on intellectual property rights ? Is it banning the creation of leading European technological companies ? François Lévêque challenges the latest suspicions concerning the European Commission in these matters. European competition law has been modernised and is increasingly based on economic analysis. Decisions taken in the interest of competition and consumers do not in any way call into question either intellectual property rights or the possibility of a technological company assuming a dominant position, which is essential in this industry of standards.

TALK : François Lévêque

On September 17th, 2007, the Court of First Instance of the European Court of Justice agreed with the European Commission's ruling to condemn Microsoft for abusing its dominant position. A few days later, Thomas Barnett, assistant attorney general for the US Department of Justice's Antitrust division, declared that this decision 'rather than helping consumers, may have the unfortunate consequences of harming consumers by chilling innovation and discouraging competition.' He effectively reiterated Microsoft's position prior to the Commission's decision. Neelie Kroes, European competition commissioner, replied that it was not up to a representative of the American administration to criticise 'an independent court of law outside his jurisdiction'. As for Microsoft, it kept a low profile and scrupulously applied the orders which had been imposed.

On October 1st, 2007, the European Commission initiated proceedings against Qualcomm, a Californian company which holds a large number of intellectual property rights in the CDMA and WCDMA standards for mobile phones. On October 13th, the Commission launched an in-depth investigation into the purchase of Double-Click by Google aimed at examining potential risks of anti-competitive effects as a result of this merger. The Commission is also continuing proceedings against Intel and Rambus. Those against Apple have recently been resolved.

This series of decisions has sparked numerous reactions and controversies which are of particular interest to me as I conduct research based on economic analysis of competition law, intellectual property rights and sectorial regulation. Before I examine these questions, I shall outline the principles of competition law.

Competition law or 'Antitrust'

Competition law, or 'antitrust' as it is also known, first appeared in the United States at the end of the 19th century.

Protecting competition or competitors ?

Initially, the aim of antitrust was to protect small companies from larger ones and consequently to protect competitors rather than competition. This initial orientation was abandoned about thirty years ago. American competition authorities no longer make their decisions based on a competitor who considers himself threatened, but according to the wish to maintain competition in the interests of consumers.

Abuse of a dominant position

The essential factor which drives companies to innovate is the hope of achieving a competitive advantage by improving the quality of their products and reducing their costs. Antitrust does not aim to remove this incentive which is considered a crucial factor in economic growth. No legal or economic antitrust expert could criticise the way in which Microsoft gained its dominant position either because of its operating system for PCs (Windows) or its Office series of applications. Microsoft was neither condemned in the United States nor Europe for holding approximately 90 % of the market share in these two sectors.

EU competition law does not condemn a company for its dominant position which has generally been acquired by merit and is likely to be of benefit to the consumer. However, it does condemn the abuse of a dominant position. Abuse constitutes an attempt to eliminate one's competitor by fixing sales prices lower than production costs, before raising prices once the competitor has dropped out.

Anti-competitive effects of mergers and acquisitions

When a merger or acquisition takes place, competition authorities assess whether this move is likely to have an anti-competitive effect.

After examination, the authorities may take one of three decisions. The most common decision is to grant permission for the operation in its current state. On the face of it, mergers are considered to be favourable both to the economy and to consumers, and they should only be banned or restricted if there are perceived anti-competitive effects.

The next most common decision is that permission may be granted subject to certain conditions, thereby forcing a company to take certain 'remedies' or commitments in order to correct the anti-competitive effects of the operation. Let us take as an example the merger of two national cinema chains. As a result of this, all the cinemas in the city of Caen now belong to a new company. It is unlikely that the merger will be banned, but the chain will have to sell one of its cinemas in Caen to another company so that there are no local anti-competitive effects as a result of the merger.

The least likely decision is a ban. Since 1989, the European Commission has investigated approximately 3,000 mergers of which only 14 were banned.

A protectionist and political bias ?

One of the criticisms raised by the European Commission's legal action is that there are suspicions of anti-American protectionism. It is true that all the companies I mentioned at the beginning of my talk are American and most of them are Californian.

Since 2000, approximately 200 mergers and acquisitions carried out by international companies were examined both by the European Commission and the American competition authorities. Generally speaking, both bodies make the same decisions in each case. They authorised 126 operations in their current state, 29 subject to certain conditions, and banned one operation. Differences of opinion arise only in a very small number of operations, and can be explained by the fact that an operation may sometimes cause anti-competitive effects in Europe, but not in the United States, or vice versa. The greatest difference concerned the General Electric-Honeywell operation in 2002. It was authorised in the US, but banned in Europe. A lot of ink was spilled over this. However, this was an exception.

The list of companies recently sanctioned by the European Commission includes Microsoft which was already condemned in the United States in 2000. European legal action was taken against Microsoft by two American companies, Sun Microsystems and Real Networks. Qualcomm was also the subject of an action brought in the United States for allegedly having violated the Sherman Act. European companies Nokia and Ericcson were among the plaintiffs acting with the European Commission against this company, as were the American companies Broadcom and Texas Instruments. The Federal Trade Commission had already condemned Rambus in February 2007, and the state of New York has recently launched formal proceedings against Intel. Therefore, it is not possible to talk about protectionist bias.

Is European competition law enforcement obsolete ?

Some observers considered that the application of antitrust in Europe was obsolete. The European Commission and the Directorate-General for Competition adopted an approach which was essentially legal and formalistic to the detriment of economic analysis. Their aim was to protect competitors rather than competition.

Accelerated modernisation

This criticism was perhaps relevant a few years ago but the European Commission decided to accelerate the modernisation of its antitrust especially at the instigation of Mario Monti, a former Commissioner for competition policy. A series of rules which appeared in 2000 have replaced earlier texts.

The most famous texts concerning antitrust can be found in Article 81 of the EC Treaty. Article 81 covers the co-ordinated competitive behaviour of companies, and condemns cartels. Article 82 deals with the abuse of a dominant position. The European Commission has also strengthened its regulations regarding concentration and adopted a new regulation in 2004 concerning technology transfers. The Commission also has rules about State aid, something which does not exist in American antitrust.

A European network of competition authorities was created and a chief competition economist, reporting to the Director General, was appointed as the head of a team of economists in charge of studying the most complex antitrust cases. Finally, the hearing officers, responsible for safeguarding the parties and their procedural rights, now report directly to the competition commissioner and have had their role strengthened.

Nowadays, the Commission is interested in the anti-competitive effects of corporate strategy rather than the characterisation of company behaviour. However, the belief remains in the United States that European law favours competitors rather than competition and consumers. This is why many American companies prefer to attack their competitors in Europe rather than those at home. Thomas Barnett's remarks unfortunately may well tend to reinforce this belief.

The differences

Two important differences still remain between European antitrust and American law. Firstly, in Europe, it is the Commission which takes decisions regarding concentration, and the judge only intervenes if the case goes to appeal. In the United States, the judge intervenes from the very beginning : if the justice minister opposes a merger, the judge takes this into account as well as the companies which want to merge.

The second difference is cultural. In the United States, everyone agrees that public authorities, competition authorities and judges may make mistakes. Sometimes there is a fine line between an aggressive competition policy and the abuse of a dominant position. If in doubt, it is preferable not to punish the wrong-doers so that the innocent party is not punished. In Europe, this sort of discussion does not take place : competition authorities do not envisage the risk of making mistakes, and do not share the conviction that the risk of wrongly condemning companies would be greater than that of leaving the guilty unpunished.

Antitrust and hi-tech

These matters pose important questions for economists, such as 'is antitrust adapted to the hi-tech sector ?' This sector appears to operate contrary to the most fundamental rules of competition law.

Pharmaceutical, IT and communication companies are battling it out to produce innovations in the hope that this will bring them the entire market share. How can this aim be reconciled with the obligation not to abuse a dominant position ?

This sector is characterised by an important difference between the prices charged and the marginal costs, which are sometimes very small. This is not in keeping with the idea of standard competition dictated by price.

Another difficulty concerning the rules of competition is that hi-tech industries cover a mass of complementary products and not substitute products. If products A and B are substitute products, an increase in the price of A will result in an increase in sales of B because consumers will buy B instead of A. However, if A and B are complementary products (such as skis and ski bindings), an increase in the price of A will result in a fall in sales of B because consumers buy both A and B. The manufacturers of A and B are therefore strongly encouraged to combine their activities. However, any such attempt automatically appears suspicious to competition authorities.

Lastly, the hi-tech sector is characterised by the importance of network, either its direct effects (the possibility of using a telephone increases with the number of subscribers) or indirect effects (the greater the number of users of a games console, the greater the number of games for this console that are available). These snowball effects are crucial because they can enable companies to take almost the entire market share, as in the case of Windows or Office. To offset the network effect, it may be in a company's interest to sell its initial products at a loss. An example of this is the case of the first French Minitel terminals which were distributed free to subscribers ; subsequent terminals were subsidised by revenues from services provided. A company should also have a good relationship with its competitors to establish standards in order to make the most of the network effect.

If one were to adopt a 'limited' application of antitrust, the entire hi-tech sector would fall within the provisions of the law. Luckily, this has not been the case in Europe for about ten years. Competition authorities, rather than showing concern when a company's market shares appear to be important, investigate whether this situation has unfavourable effects on consumers.

Competition and innovation

Analysing cases where competition takes place through innovation still remains difficult. Contributions from economic theory about dynamic competition according to Schumpeter, whereby competition can be judged by an ability to innovate, are a great deal more modest than in the area of static analysis according to the models of Cournot and Bertrand, which deal with oligopolistic competition in price or quantity. There is no economic law clarifying the link between innovation and competition. One cannot say that competition is always favourable nor that it is always unfavourable to innovation.

A company which finds itself in a competitive situation has probably more to gain by innovation than if it were in a monopoly situation. However, companies in concentrated (many operators) sectors have more resources at their disposal to innovate, especially if the monopoly they hold is legal, as in certain state companies.

In the United States, one tends to think that public authorities should not interfere in decisions concerning innovation, as this is a crucial and very complex area where one should let the market react. This is especially so since long-term gains resulting from competition by innovation are greater than losses suffered in the short term by consumers as a result of a monopoly. In Europe, there is a tendency to think that public authorities should protect innovation, as a guarantee of the interests of the consumer in the long term, and that they should fight against monopolies.

The verdict against Microsoft

Generally speaking, competition authorities speculate that if a merger or a particular form of behaviour reduce competition, then there is a risk of reducing innovation. If they manage to show that the merger or misbehaviour are anti-competitive, then the defendant has to show that these anti-competitive effects are counterbalanced by a favourable effect on innovation.

The European Commission's test

This approach was adopted by the European Commission in the case of Microsoft.

When Microsoft refused to give its competitors information about the Windows interfaces which allowed Microsoft to develop operating systems for interoperable hosts with PCs, the European Commission suggested asking the following question : 'Does the refusal of a licence diminish the incentive of the entire industry – including Microsoft and its competitors – to innovate '

According to the Commission's conclusions, the negative effect imposed by the obligation to provide information on Microsoft's incentive to innovate, was compensated for by the positive effects on innovation for the entire sector, including Microsoft. This was stimulated by principles governing intellectual priority whose aim is to encourage incentives for innovation in an entire industry and not in a particular company. By imposing licences which have favourable effects on innovation throughout the entire industry, antitrust is consistent with the principles of intellectual property.

The Court of First Instance's judgment

The Court of First Instance, to which an appeal was made, rejected this economic test and adopted a more legal and formal approach. It considered that the European Commission could force a company that had abused its dominant position to grant licences, as long as a series of exceptional conditions were met. The refusal of a licence related to an essential input, eliminated the competition, deprived consumers of a new product, and was not objectively justified.

This approach, which is very legal, is fraught with problems for an economist. For example, it beggars the question 'what exactly is a new product ?' Is a car, which exists in a colour which has never been seen before, a new product ?

The question of the licence fee

The European Commission's test comes up against another difficulty. One can only show that the obligation to have a licence will have no effect on the incentives for innovation, if the licence fee and the conditions of the compulsory licence are known in advance. In the beginning, Microsoft requested 5.95 % of the total licence fee for products developed using information from the Windows interfaces to guarantee their interoperability. After the Court of First Instance's decision, Microsoft only received 0.4% of this amount. Worse still, Microsoft was forced to pay an all-inclusive licence fee of 10,000 Euros for the development of free software. Is it really the case that under these conditions, Microsoft's incentive to innovate is not being compromised ?

By imposing licences, competition authorities risk causing a reduction in R&D investments because the company knows in advance that one day it may be forced to share its intellectual property. In addition, competition authorities are not equipped to determine the level of licence fees. Forcing competitors to talk about this between themselves may encourage collusion.

Should intellectual property be challenged ?

Some commentators have emphasised that, in the cases I have mentioned, antitrust has tended to question the rights of intellectual property. In the Microsoft case, the European Commission asked Microsoft to divulge the content of its licence and give its competitors information which had been protected by patents, royalties and trade secrets. However, competition law was not more dominant than the law of intellectual property. On the contrary, in order to force access sharing of intellectual property, the Court of First Instance imposed conditions that are even more strict than those necessary to force other property rights.

Negotiations about standards and collusion

This decision still raises a very interesting question about the increasingly important role of intellectual property in the definition of standards. Companies have realised that having intellectual property rights to a technology which is included in a standard model is a huge advantage. At standardisation meetings, companies negotiate fiercely so that technologies to which they have the rights are integrated into the standard model.

Such negotiation may look like collusion, which is more characteristic in the practice of cartels. Competition authorities, both in the US and Europe, are increasingly in favour of discussions between owners of intellectual property, because in this way only the patents which are really essential are chosen, and the price of the entire licence fee is limited. This benefits the consumer in the end. Let us take the example of technology A, which is very efficient and is protected by a patent, and technology B which is slightly less efficient and has no patent. Both could be chosen as a standard model. It would be more advantageous if the standardisation committee chose technology B so that the licence fee on the standard model became less expensive and the standard model would sell better.

Patent ambush

A practice known as 'patent ambush hold-up' is very harmful to the consumer. This was a tactic used by Rambus. While Rambus was part of a JEDEC (Joint Electron Device Engineering Council) standardisation committee to define a standard model on RAM (Random Access Memory), it took advantage of its position by drafting patent claims which it registered secretly and which it did not disclose to the other committee members. Once the standard model was adopted, Rambus sued the standard users for patent infringement. These users, having already invested money in developing the standard model, then had to buy licences according to conditions set by Rambus.

This practice has another harmful effect. Fear of being 'held to ransom' discourages investment and undermines the distribution of standard models. Competition authorities in both the US and Europe are trying to prevent this behaviour which they liken to abuse of a dominant position.

Change which is favourable to innovation

In conclusion, there is neither political nor protectionist bias in European antitrust. Antitrust has been modernised and devotes more time to economic analysis. Contrary to what is often alleged, there is no obvious dominance of antitrust over the rights of intellectual property. Finally, it does not seem necessary to alter antitrust in order to adapt it to the requirements of the hi-tech sector. It is sufficiently flexible to take these into account.

However, co-ordination between competition authorities should be strengthened, because an increasing number of cases are being examined in Europe, the US and Korea, and in the past two years China has approved competition legislation. Competition advocacy ought to be developed. This is the promotion of competition and vigilance to prevent governments from adopting regulations that have anti-competitive effects.

DISCUSSION

Is it for good or evil ?

Question : *Discussion about innovation makes me think about Montesquieu. Innovation destroys jobs by giving consumers products which they do not need. However, it is also a source of wealth and stimulates growth. Good and evil balance each other in an uncertain way. According to Montesquieu, this conflict of interest is necessary and legitimate. One simply has to make sure that no one is forgotten.*

François Lévêque : In the United States, it is believed that innovation is always good. Yet even from a strictly economic point of view, it is not possible to defend such as assertion. When the anticipated R&D profit falls below its cost, one must stop investing in R&D. But since it is impossible to calculate the optimum investment in R&D, one prefers to stick to one's beliefs.

Concentration and innovation

Q. : *The monopoly of SNCF did not interfere in the creation of the TGV. With hindsight, are we in a position to judge whether the convictions for abuse of a dominant position announced in Europe and the United States were beneficial or harmful to innovation ?*

F. L. : The only empirical economic work which exists in this field is in relation to monitoring concentrations. We have three thousand notifications in Europe and several hundreds in the United States. Regarding the abuse of a dominant position, we only have about fifty cases in Europe which does not justify econometric studies.

According to Schumpeter's thesis, every monopoly becomes eroded in the end. Because there is a monopoly, raising prices only attracts other companies which try to undercut the market using new technologies or cheaper prices. Even if competition law did not exist, there would still be competition ! We can see areas where antitrust plays a particularly important role. The two areas in which competition takes place are the geographical expansion of the market and technological development. If you are the brioche market leader in your town and you are faced with a rival from a neighbouring town, you try to develop your business further afield or alternatively, innovate in order to gain a new market share. In some service areas, such as gas or electricity, the natural tendency to expand comes very slowly because the necessary interconnections are very expensive, and innovation does not follow as rapidly as in other sectors. Antitrust may then help to compensate for the absence of 'natural' competition.

Antitrust in Asia

Q. : *You mentioned Europe and the United States, but what is the situation with antitrust in Asia ?*

F. L. : Japan has a competition authority similar to that in Europe or America in terms of quality. Korea has an impressive competition law and a competent authority. China has antitrust, but until now, it is essentially protectionist, and is mostly concerned with the parts which bans foreign companies from buying Chinese companies. It will undoubtedly take a great deal of time before articles concerning abuse of a dominant position can be applied.

Q. : *As far as IT consumers are concerned, standard models are increasingly imposed* de facto *by the most powerful manufacturer. Only then can discussion about the sale of licences begin. Does this practice not risk becoming more generalised with the movement of market and manufacturing sites from Europe to Asia ?*

F. L. : I do not think that we are heading towards practices of uncontrolled competition. On the contrary. China, having attempted to define and impose its own standards on the rest of

the world, understood that it was in its own interest to take part in organisations which define standards on a global level. China is attempting to develop its own standards, but wants them to be approved on other markets. In some cases, Chinese companies such as Huawei or even China Telecom have rejected Chinese standards.

The main risk does not come from de facto standards that some people would like to impose on others, but rather from the difficulty in negotiation when the number of people concerned is constantly increasing, as is the case at present. Standardisation bodies work more and more slowly, and yet the advantage of a collectively-devised standard is that it is put into practice before the standards that are defined by the market.

Competition and protectionism

Q. : *There are several examples in Europe showing that competition rules are applied with a sort of naive purity, whereas in the United States, they are only used in an opportunistic way according to protectionist interests. Examples of this are the Boeing-Airbus conflict, the protection of an obsolete iron and steel industry and the diktats of the Food & Drug Administration.*

F. L. : The attraction of protectionism remains very strong. Antitrust does not develop in a state of weightlessness, independent of its institutional environment. Before George W. Bush became President, the Department of Justice was ready to dismantle Microsoft. After his election, a new official in charge of antitrust was appointed. A few retaliatory measures were imposed on Microsoft, not to any great effect, but it was not dismantled. In Europe and the United States, there are important principles which prevent competition authorities from making random decisions. The problem remains unchanged when the dispute concerns companies such as Gazprom (energy sector) or Huawei (telecommunications).

Patents and monopolies

Q. : *Now that patents apply to standards, which can result in the right to have a monopoly, does this not lead to questions on the legitimacy of intellectual property ?*

F. L. : The problems of the patent system are well known. There are too many patents and too much abuse in their strategic use, notably by 'patent trolls' : these are companies which produce nothing, but have patents, and threaten other companies with injunctions for breach of intellectual property. Since the stake is huge, such as a company being banned from commercial activity, it generally prefers to compromise and give the troll what he wants. It is not possible to abolish the intellectual property system, only to reform it. Several government bills are being prepared in the United States where abuses are particularly flagrant.

However, one cannot criticise the patent for giving the right to have a monopoly. It confers exclusive rights, which is different. If the product protected by the patent has no substitute, it is a monopoly, but if there are substitutes, the patent will only cover a part of the market. The main criticism levelled at the patent system is not that it creates monopolies, but that it has spun completely out of control.

A unique model

Q. : *In antitrust, will the American model or the European model be the winner ?*

F. L. : Antitrust appeared in the United States in 1890, and in France as recently as 1960. The only real model is the American model from which all the others are derived. In other areas of law, such as business law, there are quite different ideas, but not in antitrust. One of the differences, apart from those I have already mentioned, is that in the United States company directors can be sentenced to twenty years in prison for belonging to a cartel. The European Commission does not have this power. It can only impose fines that are much less of a deterrent.

Presentation of the speaker :

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