World Competition

Law and Economics Review
Economic Analysis and Antitrust Damages

Franklin M. FISHER*

This article considers several economics-related issues in the theory of damages — especially in private antitrust cases, drawing possible lessons for Europe from US experience. It begins with an overview of different rationales for such damages and their implications. Such rationales include: making the plaintiff whole; preventing unjust enrichment; and incentives to private plaintiffs. Problems from US experience include whether to allow recovery by indirect purchasers (Illinois Brick), and the creation by treble damages of incentives to bring meritless cases that can then be settled for profit.

I. WHAT ARE DAMAGES FOR?

I understand that private suits for recovery of damages in antitrust cases are being encouraged by the European Commission.1 Of course, private suits to recover damages in such cases have been allowed in the United States for a very long time, and for the same reason that the EU is now considering it: assisting enforcement through the creation of many “private attorneys general”. (Indeed, in the United States, we provide a large incentive for private suits through the Clayton Act of 1914’s provision for treble damages.2 I shall return to this later.) This thus appears an appropriate time for comment on the role of damages in general and in antitrust cases in particular, and on some aspects of the use of economic evidence in such cases. I do so, drawing on US cases and experience where appropriate.3

There are three basic reasons for the assessment of damages. These are:

a) Making the plaintiff whole so that no injury has occurred;
b) Ensuring that there is no unjust enrichment, so that the defendant does not profit from its illegal acts; and
c) Providing a disincentive to anyone considering breaking the law.

---

* Franklin M. Fisher is the Jane Berkowitz Carlton and Dennis William Carlton Professor of Microeconomics Emeritus, Massachusetts Institute of Technology. He is indebted to Maarten Pieter Schinkel for suggesting that he write this article and to him, Daniel Jonas, and Evan S. Schouten for helpful comments and criticism. Naturally, he retains responsibility for error.


A. MAKING THE PLAINTIFF WHOLE

The objective of the use of this standard is one of simple justice to the injured party. One wants to ensure that the plaintiff ends up without being injured because of the acts found to be illegal. But exactly how to proceed on this basis is not so simple. The article on this that I co-authored about 15 years ago is now fairly well-known in the United States, but may not be so in Europe, so I shall begin by summarising its argument, using a helpful non-antitrust example. (I shall come to antitrust issues later on.)

That article, *Janis Joplin’s Yearbook and the Theory of Damages*, takes its name from a question that was posed to me at a deposition. Leave antitrust aside for a moment and consider the following example:

Janis Joplin (whom European audiences may not be able to identify as well as American audiences – at least of a certain age) was a rock star. Suppose that, when she was a Senior in Secondary School, she signed a classmate’s copy of the School Yearbook. Suppose further, that no one knew that she would one day be a famous rock star and that such Yearbooks, with or without the Joplin signature, were freely available for five dollars per copy.

Now suppose that the copy with Joplin’s signature was stolen just after the book was signed and, for the moment, assume that the thief destroyed it. The thief was apprehended and was sued for damages by the rightful owner. Naturally, the case came to trial at a later time, by which time, Joplin had become famous and her signature quite valuable, so that the Joplin yearbook would be worth $1,000. The thief having been found liable in the civil suit, the question is what damages should be assessed and awarded so as to make the plaintiff whole.

At first glance, the answer would seem to be the value of the signed Yearbook at the time of the damages award; but, as we shall now see, that is not correct.

The problem can be broken into two parts:

a) How would we have made the plaintiff whole had damages been awarded at the time of the theft?

b) How should we adjust such an award for the fact that damages are being awarded at a later time?

I begin with the second part.

Obviously, the fact that damages are being awarded at a later time means that the plaintiff has suffered not merely the same loss as if the award had been made contemporaneously, but an additional loss because he or she has not had the use of the

---

award money (equivalently, the sale value of the book) for the intervening period. Some adjustment must be made, effectively in the form of pre-judgment interest.

One might think that the adjustment should reflect the rate that the plaintiff typically earns on his or her investments. Similarly, if the plaintiff were a firm, one might suppose that it should receive pre-judgment interest at its weighted average cost of capital. But this turns out to be wrong.

The return one makes on investments has two components. These are the pure time value of money and compensation for the risk-bearing that the investments represent. But, in the present example, the plaintiff did not have the use of the money and therefore did not bear any risk in investing it. It follows that making the plaintiff whole requires pre-judgment interest at the risk-free rate — typically the interest rate on short-term government securities.

There is arguably one problem with this proposition. The plaintiff did have to bear the risk that the defendant would go bankrupt by the time the award was made. Hence, some have argued reasonably that prejudgment interest should reflect that risk, and that the plaintiff should receive such interest at the rate at which the defendant can acquire debt.

I am not going to linger on this point, the answer to which may depend on the rules for recovery of court costs. But whether pre-judgment interest is awarded at the risk-free rate or at the defendant’s borrowing rate, the rate involved has nothing to do with the plaintiff’s own rate of return on investments.

Nor should it. If it did, the award would be higher for a plaintiff in a high-risk business than for a plaintiff in a low-risk one, even though the theft was the same and even though the plaintiff’s usual risk was not borne.

In any event, it should be clear that, once we have decided on a rate for pre-judgment interest, the remaining task is to calculate the amount of damages that would have made the plaintiff whole at the time of injury. This is often not an easy task, but the important point is that one is not entitled to use hindsight here; rather, one must ask what sum the plaintiff would have accepted at the time of injury to have been just content to permit the injury to happen.5

In the Janis Joplin example, the answer is clear. Given the assumptions, the plaintiff would have been made whole at the time of injury by an award of five dollars. To make him or her whole at the time of the award requires only five dollars plus interest at the risk-free (or defendant’s borrowing) rate. It does not require damages in the amount of $1,000, the value of the yearbook at time of trial.

Note also that, if we alter the example and assume that the Joplin yearbook was stolen and not destroyed, then restitution of the yearbook at the time of trial would similarly over-compensate the plaintiff, as the plaintiff would be compensated for risk it did not bear.

5 As discussed in a later section, however, this does not wholly rule out the use of hindsight.
B. NO UNJUST ENRICHMENT

Of course, such a result appears unreasonable. But I believe that is because it suggests that the thief should be permitted to keep the yearbook and hence to profit from the bad act. That is bad policy, and it leads directly to the discussion of the second principle of damages, that of no unjust enrichment. Here there is a serious public policy question to consider.

If the plaintiff is only compensated in the amount of five dollars (plus interest at the risk-free or defendant’s borrowing rate), and the thief is permitted to keep the yearbook (or to sell it and keep the proceeds), then he or she will be rewarded for the theft, and, if this is systematically done, then there will be an incentive for others to commit similar acts. On the other hand, as we have just seen, when the unjust enrichment exceeds the amount necessary to make the plaintiff whole, then having the defendant pay the unjust enrichment amount to the plaintiff will more than compensate the plaintiff for the injury. This will be an incentive both for meritorious litigation by plaintiffs (a desirable outcome) and for non-meritorious litigation (undesirable). Indeed, it will, at the least, prompt potential plaintiffs to sue only if the opportunity lost through the injury turns out favourably, and that may even lead potential plaintiffs to encourage injury and thus avoid risks that they secretly expect to turn out badly.

The difficulty here, of course, arises from the rule (or the assumption) that what the defendant must pay the plaintiff must receive. The problem would disappear if damages were to consist of making the plaintiff whole and any excess of unjust enrichment over that amount were assessed as a fine. So far as I know, however, this is not done in practice – certainly not in US antitrust cases. Further, such a rule would provide little incentive for plaintiffs to sue where the damages required to make the plaintiff whole are low, even though the amount of unjust enrichment is high and, in any case, would provide no incentive to offer proof of unjust enrichment; such proof would have to be left to a public prosecutor.6

II. APPLYING THE PRINCIPLES TO ANTITRUST DAMAGES

I now turn to the application of these general principles to antitrust damages.

A. PRE-JUDGMENT INTEREST

The first thing that must be mentioned when applying the analysis of pre-judgment interest to antitrust cases is that, on the making-the-plaintiff-whole standard, the plaintiff must be made whole after taxes. A prominent example is that of a lost profits claim, where the plaintiff would have been taxed on the profits had they not been lost and will be taxed on the damage award. For simplicity, assume that the

6 I am indebted for this point to Evan S. Schouten.
plaintiff’s tax rates for the relevant years are all the same, then the pre-tax damage award should be the same award that would have made the plaintiff whole at the time of injury plus interest at the post-tax risk-free rate (or the post-tax defendant’s borrowing rate).

In the United States, however, when antitrust cases are tried in federal (as opposed to state) courts, pre-judgment interest is generally not permitted. The apparent reason for this is the view that the treble damage awards in private antitrust suits already over-compensate the plaintiff.

But, of course, there is no true warrant for this. Congress mandated treble damages, and the loss of the use of money is properly part of the damages that should be awarded to make the plaintiff whole. That implies that appropriate pre-judgment interest should be awarded and then the entire award trebled. Even if one thinks that treble damages make bad public policy, that is not an excuse for not including the time value of money in properly calculated damages.

In fact, I believe that there are other reasons behind the no-pre-judgment interest rule. Those reasons involve misunderstandings of the principles set forth above. In the first place, where hindsight is used to award damages — say in the form of lost profits — much of the award may be for recent losses, and interest may not seem important, particularly if the sums are large.

Beyond this, however, it is my experience (in both antitrust and non-antitrust cases), that judges often have difficulty with the idea that being deprived of the use of money is a form of damage to the plaintiff. That difficulty would be entirely understandable if the deprivation applied to the return to risk-bearing for risks that were not borne, but the failure to recognise the loss of the pure time-value of money as an injury is simply a mistake. The fact that such interest charges can be substantial is not a reason for omitting them.

B. THE USE OF HINDSIGHT

I have strongly (and correctly) argued that, to make the plaintiff whole, one needs to begin by making it whole as of the time of injury and that this precludes the use of hindsight. Rather, one needs an estimate of how much it would have taken to just compensate the plaintiff for allowing the injury at the time it occurred. The Joplin yearbook example is drawn so as to make this easy to do. In antitrust cases, however, doing this is often not so easy.

Antitrust cases frequently involve a claim for lost profits, with those lost profits extending over a period of years beginning with the initial antitrust injury. First suppose that there was only a single set of acts, all occurring in an initial year 0 but with effects

7 More complicated cases can also be handled.
8 In some states an interest rate is prescribed by statute. Typically, this is higher than the appropriate rates described above.
lasting into later years. This could happen if the plaintiff were put out of business in year 0, but is not the usual case.

In such circumstances, one wants to know what the plaintiff reasonably expected to be the stream of later profits without the injury. One would then take that stream, discount it back to year 0, and treat the result as a single injury in that year. (In doing this, it is important to note that the discounting should be at the plaintiff’s standard discount rate, its weighted cost of capital, since that is how the plaintiff would have valued the lost opportunities. The arguments for using the risk-free rate that apply in the case of pre-judgment interest do not apply here.) But it may not be easy to determine this. The plaintiff’s contemporaneous internal documents will matter, but hindsight may also play a role if it comes close to those documents.

The case where there are repeated injuries is more complicated. In principle, one would want to look at each year’s injury and inquire what the plaintiff would have accepted in that year for permitting the injury, given that the past injuries had occurred and been compensated for. But this is very likely to be impractical, since compensation for each year’s injury should then include compensation for its then foreseeable consequences. In practice, one usually has to treat the consequences of each year’s injury as occurring in that year, treating the next year’s injury as a new independent event.

C. ILLINOIS BRICK

There is, moreover, a different — and probably more serious — problem with the standard of making the plaintiff whole in antitrust cases. Many cases involve claims by customers for overcharges. But, where the customers are downstream firms that in turn either resell the product involved to customers that are further downstream or use it as an input in a different product that is then so sold, who is it that is to be made whole?

In principle, the answer is easy. The immediate customers of the defendant should recover for the overcharges net of the amount passed on to customers further downstream, but that will not suffice unless the indirect customers can also recover for the overcharges passed on to them. If there are several stages of passing on or very many customers downstream, making all the plaintiffs and potential plaintiffs whole may be very difficult indeed, if not impossible.9

9 Rüggeberg and Schinkel offer a much more detailed discussion of the pass-on issue than I give here. They suggest the adoption of a system in which, when a private suit is brought for damages due to overcharging, national competition authorities would be responsible for estimating the extent of pass-ons, and private plaintiffs at different stages of the pass-on chain would be permitted to sue the original over-charger for their actual damages: J. Rüggeberg, and M. P. Schinkel, Consolidating Antitrust Damages in Europe: A Proposal for Standing in Line with Efficient Private Enforcement, 29 W. Comp. 3 (this issue). That suggestion is, of course, theoretically correct, but I fear that application would prove to be impractical. Not only is the estimation problem likely to be quite difficult and the results uncertain, but there will be challenges at every step of the way.
Nearly 30 years ago, the US Supreme Court dealt with this issue in the *Illinois Brick* case, holding that only direct purchasers can recover for overcharges in federal antitrust cases and that no adjustment is to be made for the passing on of those overcharges. While this is rule is not followed in all state antitrust cases, it remains the law in a great many circumstances.

Of course, the rule in *Illinois Brick* deals with the difficult practical problems of allocating damages. It succeeds in preventing the defendant from retaining more than the total damage it has caused (especially after trebling). But it plainly does not make all those damaged whole and takes away the right of indirect purchasers to recover any of the damages they may have suffered. While it may be a good practical rule, it is a very bad one in principle, and can overcompensate direct plaintiffs who have passed on the overcharge and can now recover it.

Furthermore, Maarten-Pieter Schinkel and his co-authors have recently shown that the *Illinois Brick* rule may actually promote a form of vertical collusion among upstream firms and their direct purchasers. To quote their abstract, they show that:

> *Illinois Brick* facilitates upstream firms to engage horizontally in a collusive arrangement by focusing concealed vertical side-payments to discourage civil action on their direct purchasers only. Downstream firms are passed part of the upstream cartel profits through a symmetric rationing of their inputs at low prices. This ‘Illinois Wall’ arrangement sustains collusion in the production chain, substantially reducing total welfare. The more competitive the up- and downstream industries otherwise are, the more scope there is for the arrangement. Illinois Walls are shown to be resilient to entry, as well as to variations in the legal system. Several recent US cartel cases display Illinois Wall symptoms.

D. DOES SIMPLY REIMBURSING FOR OVERCHARGES MAKE THE PLAINTIFF WHOLE?

Putting *Illinois Brick* aside (and assuming that appropriate pre-judgment interest is assessed), it is not the case that simply reimbursing plaintiffs for overcharges in price-fixing cases succeeds in making them whole. Indeed, whereas when there is a pass-through, *Illinois Brick*, tends to make the immediate plaintiff more than whole, there is another standard practice that tends to make plaintiffs less than whole — and not for reasons of allocating damages among classes of purchasers.

For simplicity, assume there are only direct purchasers (and ignore questions of pre-judgment interest). Where the purchasers are the plaintiffs, the standard damage calculation is to estimate the price overcharge due to collusion or the achieving of a monopoly, say, and award that price overcharge multiplied by the quantities bought as damages.

---

That method has the merit of relative simplicity, but it understates the amount required to make the plaintiffs whole for the following reason:

When prices are anti-competitively elevated, buyers are not only damaged by paying more for the units of the product that they buy at the higher prices, they are also damaged by being denied the opportunity to purchase further units at competitive prices.

Figure 1 depicts the demand curve for a product (for simplicity drawn as a straight line). Consider the case of a monopoly. The monopolist’s marginal revenue curve (also straight-line) is shown as well. \( P_C \) denotes the competitive price, and \( Q_C \) the quantity that would be bought at that price. The horizontal line at \( P_C \) is assumed at the level of the monopolist’s marginal cost, so the profit-maximising monopolist will reduce output to \( Q_M \) by raising price to \( P_M \), gaining more from the increased price on the reduced sales than it loses by not making so many sales.

Customers are damaged by two effects. The first, the extra payments for the reduced quantity, \( Q_M \), is represented by the size of the rectangle ABDC. This is what is given in the standard damage award. But the second, the size of the triangle, BDE, is typically not awarded. It can be shown to represent the monetary value to the customer of being able to buy the additional quantity \( (Q_C - Q_M) \) at the competitive price.
It is worth remarking that the usual award is less than the amount required to make the plaintiff whole but in some sense greater than the defendant’s unjust enrichment. This is because, while the defendant certainly gained the rectangle ABDC—greater profits on the units it did sell, it gave up the profits it would have made by selling additional units, \((Q_C - Q_M)\) at the competitive price. This is not allowed as an offset, and there is at least an argument that it should be.

E. TREBLE DAMAGES

But, of course, the most notable feature of US damage awards in antitrust cases is that of treble damages. This generally makes the plaintiff more than whole and also generally more than removes any unjust enrichment.\(^{13}\) As such, it provides a disincentive to engage in antitrust violations. But the real purpose here is to provide an incentive to potential private plaintiffs to bring private antitrust actions, thus contributing to antitrust enforcement through the actions of “private attorneys general”.

The problem is that such an incentive may well be too large. Most antitrust cases brought in the United States are private, and a great many of those are without merit.\(^{14}\) Firms, injured by competition on the merits, often bring antitrust suits against their competitors hoping to recoup by gaining the treble-damage prize. Some even succeed, at least in the lower courts. Such cases are good for consulting economists and for attorneys, but they are a drag on the court system and an expense to the economy. They may also chill vigorous competition. The institution of private damage awards in the EU may lead to similar effects—especially where antitrust verdicts rely too heavily on market share standards to gauge “dominance”.

There is an additional pernicious effect of treble damages that is seen most clearly in class-action antitrust suits. Here, the situation is often as follows:

Class actions are brought when the plaintiffs are numerous and the issues involved in their cases are common among them. In antitrust suits, this is often thought to occur in price-fixing cases and class-action attorneys always claim that differences in damages can be handled through some common method. If the case is won by the class plaintiffs, then the attorneys typically get a large part of the damage award as their fee.

Now, I do not mean to suggest that all such cases are without merit. However, the following observations apply independently of the merits of the case. The first major stage of such a case involves a decision by the presiding judge as to whether to certify the class. Very often, judges appear to consider the fact that, if the class is not certified, the case will disappear, because the individual plaintiffs will not be able to afford to sue

\(^{13}\) I say “generally” as to making the plaintiff whole because, as described in the preceding subsection (and in the discussion of pre-judgment interest), the award that is to be trebled is not always the amount that would make the plaintiff whole. I say “generally” as to unjust enrichment because if the damages required to make the plaintiff whole are much less than the unjust enrichment involved and the lesser amount is to be trebled, there is at least the possibility that some unjust enrichment will remain.

\(^{14}\) I do not mean to imply that all government cases are good ones. Indeed, the stipulation ending the great IBM case of the 1970s stated that the case had been “without merit”—a correct appraisal.
separately. This seems unfair to the plaintiffs if the case has merit. Hence, the judge tends to certify the class, perhaps relying on the proposition that he or she can always decertify it if it appears later on or at trial that certification was a mistake.

The problem is that, if the class is certified, there will usually be no “later on” and no trial. Because of treble damages, the defendants’ exposure if a large class is certified can become enormous. Hence there is great pressure on them to settle, and this is what usually happens. Thus the case is effectively decided at the class certification stage instead of on the merits — a fact that many judges do not appear to realise.

This phenomenon — largely induced by treble damages — encourages the bringing of unmeritorious cases. It has, I believe, led to a sort of legal piracy. But this is only the extreme example of the poor effects of treble damages.

Despite my strong opinions here, I do not have good suggestions as to how to fix this problem. Without extra damages — treble or otherwise — private plaintiffs will have less incentive to sue, and damage awards may not be large enough to discourage anti-trust violations.

In Europe, however, there is some reason to believe that the problem may not be as serious as in the United States. In the first place, I understand that class-action suits are much rarer in the EU than in the United States. More generally, where the losing party must pay the legal expenses of the winner (not the rule in the United States), this may help to limit the incentive to bring relatively meritless cases.

III. PROVING ANTI-TRUST DAMAGES IN PRACTICE

I close by offering some observations on the use of economic analysis in providing estimates of antitrust damages — beyond the principles that I have already discussed.

In the United States, the standard of proof for antitrust damages is lower than that for antitrust liability. This is on the reasonable view that we cannot know precisely what the world would have been like in the absence of the defendant’s illegal acts. Hence, while damages cannot be estimated using guesswork, those acts should not be allowed to destroy all ability to measure them.

There are two at least apparent difficulties here. The first relates to one of the principles earlier discussed. I have pointed out that damages that are to make the plaintiff whole should not be estimated using hindsight but should be based on an estimate of the amount that the plaintiff would have accepted to permit the violations. If one takes that proposition wholly literally, it would appear that one need not investigate what would have happened but for the violation.

That is not often the case in antitrust, however, at least in lost profits cases. Ideally, there would be contemporaneous documents showing what the plaintiff reasonably expected to gain in a violation-free world. Sometimes this is true, and sometimes not.

15 In the case of a continuing violation or stream of violations, this would require such documents in every period.
Even when such documents exist, however, they need to be examined for reasonableness. Internal documents produced by staffers recommending a course of action can often be over-rosy in their predictions. While the plaintiff is entitled to be compensated for the loss of a fully expected rosy opportunity, even if it would not have come true, some proof needs to be provided that the expectations were reasonable ones. This can be done by building a suitable (preferably econometric) model of the business and market involved using data only available to the plaintiff as of the time of injury and using it to forecast what profits would have been absent the injury, comparing that forecast with actual profits. If that forecast agrees with the internal documents, so much the better. If it does not or if there are no internal documents, then one may wish to use the model forecast anyway as evidence of what a reasonable person would have believed at the time.

Note that, in the use of such a model, one should allow for the influence of factors such as general economic conditions that are outside the control of either party. While it is true that the no-hindsight principle implies that the plaintiff is entitled to be compensated for the forecast it would have made at the time – including the forecast of such outside factors – the latter forecast would surely have been known to be subject to uncertainty, and the plaintiff cannot have held it to be absolutely sure. The obvious tack here is to use the actual values of the exogenous factors, although an argument can be made for a more complicated approach.

The second difficulty with the relatively low standard of proof for antitrust damages is that it may well lead to acceptance of truly shoddy work on the part of the plaintiff’s economic expert. This seems to me to have occurred in the Conwood case, where the plaintiff’s expert based his econometric model wholly on assumptions about the market shares in different states that the plaintiff would have had in the but-for world. Now, sometimes such a simplistic approach may be all that is available, but there is an obligation to consider whether a more sophisticated model can be built and, if not, explicitly to explain why.

Such a model is an attempt to account for all significant factors that influence the variable or variables to be predicted. Too often, supposed “experts” simply use a before-and-after approach with all differences attributed to the defendant’s actions. Too often, also, the more elaborate version that attempts to get around this is not one that would pass muster in a refereed journal or even in an econometrics class. Unfortunately, judges are not seriously trained in such matters, and cannot easily distinguish between good and bad practice. Moreover, a really sophisticated model may be difficult for them to understand.

---


17 Such cases are not confined to the United States. In a recent telecom case in Spain (Conduit v. Telefónica, Case No. 36/2005, Judgment of the 5th Commercial Court of Madrid of 11 November 2005), an aspiring entrant was awarded about _600,000 on the claim that it had not been able to attain the same market share that it had in the United Kingdom.
This is made more difficult by the following. In principle, the damages calculation should be related to the theory of liability. With sufficient information, a good model will do that. But this is often not possible in great detail, and, in particular, the requirement sometimes imposed that, where there are several bad acts said to cause damages, the model (and the expert) should allocate the damages among them is typically impossible to fulfil. Judges do not always understand this and it is up to the expert to explain why it is so.

Obviously, a good deal of responsibility rests on the expert putting forth the damages analysis. And the defence had better have a skilled expert in reply.\textsuperscript{18}

Kluwer Law International is a renowned publisher of books, journals, and looseleafs in areas of international legal practice.

We publish important and interesting titles in the following areas:

- Air & Space Law
- Arbitration
- Banking and Finance Law
- Business Law
- Commercial law
- Company/Corporate Law
- Competition Law
- Environmental Law
- European Community Law
- Intellectual Property
- International Trade Law
- Labour Law
- Maritime Law
- Taxation

Please browse our website for information on all our books, journals, looseleafs and electronic products: www.kluwerlaw.com

**KluwerLawOnline: One of the most complete libraries on the web**

Kluwer Law Online is your online gateway to Kluwer Law International publications. Completely revamped, the Kluwer Law Online is packed with new functionality.

Improved functionality includes:

- inclusion of product types other than journals
- regularly updated homepage texts to keep you informed about us and our products
- a homepage for every publication
- improved Browse Topics
- suggestions for related titles
- informative and regularly updated site texts (About Us, Contact Us)

At www.kluwerlawonline.com, you will find all our journals online. Feel free to browse the site and view a sample copy of the journal of your interest.
World Competition Law and Economics Review

*World Competition* specializes in competition and, to a lesser extent, trade issues. Contributions from authorities in the field cover mainly European Union competition law, U.S. antitrust laws, Japanese unfair trade practices laws and national competition laws. As the name of the journal has been claiming for more than 25 years, the *Review* is also a forum for heated academic discussions about the implementation of a system of international competition.

*World Competition* includes articles on hot topics such as:

- EUUS antitrust policy differences
- Competition policy and trade liberalization
- Economics of antitrust laws
- Trademark exhaustion
- Merger control
- Efficiencies
- Antidumping and competition policy
- IP licensing
- Abuses of dominant position
- Parallel trade under EC law
- And much more!

The *Review* examines all aspects of competition policy from, primarily, a legal perspective, but also from an economic point of view. By taking both disciplines into account, it uniquely enables readers to understand competition issues. Its currency and multi-disciplinary approach make it essential reading for practitioners and academics in the field.

Editor-in-Chief: José Rivas

Editors: Ralf Bosscheck; Marie Demetriou; Juan Gutiérrez; Donogh Hardiman; Bróna Heenan; Imelda Higgins; Henry Huser; Benoît Keane; Ignace Maselis; Pablo Muñiz; Ali Nikpay; Morten Nissen; Dimosthenis Papakrivopoulos; Rudolph Peritz; Ernst-Ulrich Petersmann; Tom Pick; Douglas Rutzen; Michael Weiner

Advisory Board: Robert Anderson; Christopher Bellamy; David Edward; Claus-Dieter Ehlersmann; Jonathan Faull; Allan Fels; Nicholas Forwood; Eleanor M. Fox; Rafael García-Valdecasas y Fernández; Francisco Enrique González-Diaz; Barry E. Hawk; Herbert Hovenkamp; Rafael Illescas Ortiz; Frédéric Jenny; Valentine Korah; Koen Lenaerts; Ignacio de León; Patrick MacNutt; John L. Murray; David O’Keeffe; Giuseppe Tesauro; Wouter P.J. Wils

For more information about World Competition, please visit www.kluwerlawonline.com/worldcompetition