Global Arbitration Review

The Guide to Damages in International Arbitration

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Damages in Competition/Antitrust Arbitrations

Carlos Lapuerta and Richard Caldwell¹

Many arbitrations involve competition law claims. In arbitration proceedings that involve contracts, one party may claim that a particular contractual provision is anticompetitive, or that market power or abusive conduct has distorted the market in a manner that is relevant to the question facing the tribunal. For example, we have seen competition issues raised in disputes over the review of prices in major long-term contracts for the sale or purchase of energy. Competition claims can also arise in investor-state disputes, as when the state's actions or omissions are alleged to distort competition. Below we address several issues that are relevant to the calculation of damages from competition claims: the determination of market shares, calculating overcharges in price-fixing and monopolisation cases, and finally a prominent recent debate on whether awards for damages in investor-state disputes can themselves lead to distortions of competition or set adverse precedent that would undermine the future enforcement of competition law.

Determining market shares

To estimate damages from a competition law claim, the expert must compare the financial position of the claimant under two alternative scenarios. One scenario is the actual scenario that reflects the distortions of the alleged anticompetitive conduct. The other scenario is inherently hypothetical: one in which the alleged anticompetitive conduct had never occurred. Market shares are relevant because the respondent's alleged conduct may well have suppressed the market share of the claimant, so the damages analysis must assess the market share that the claimant could have reasonably expected to obtain in the absence of the disputed conduct.

¹ Carlos Lapuerta and Richard Caldwell are both principals of the Brattle Group, based in the London office. They have worked closely together for many years.

Assessing a hypothetical scenario is not actually unique to competition law claims; it follows directly from the broader principle of making the claimant whole, which governs the estimate of damages from a broad spectrum of legal claims. When someone breaches a contract, the estimate of damages must consider what would have happened, but never did, had the respondent continued to honour the contract. However, claims for damages from competition claims are particularly susceptible to challenges of speculation, because it seems relatively straightforward to reconstruct a hypothetical scenario of uninterrupted contract performance, as opposed to reconstructing a scenario in which the market shares of various competitors differ significantly from reality.

For claimants there are several responses to allegations of speculation over market shares. A general logical response is that the respondent is itself responsible for the need to speculate; the respondent's conduct has distorted the actual distribution of market shares, requiring the very inquiry that the respondent declares speculative. A more specific evidentiary response involves a careful review of the records retained in the ordinary course of business by the claimant. Most claimants retain business plans and financial projections that they developed in the ordinary course of business prior to the commencement of the disputed conduct. Those plans often contain projections of the market shares that the claimants anticipated, and a sound analysis of damages should investigate their reasonableness. Their reasonableness should command particular weight if the claimant demonstrated a willingness to invest, or was able to attract financing, in reliance on the specific projections of future market shares.

To check the reasonableness of a claimant's projections there are two common techniques: an analysis of time series data, and comparisons to other geographic or product markets in which the claimant is also present. The time series approach looks at the market share that the claimant had prior to the initiation of the disputed conduct, and may entail extrapolations from growth that occurred beforehand. Comparison to other geographic and product markets can test the ability of the claimant to succeed in other areas where the conduct in dispute never occurred.

The economic literature has developed several useful tools for assessing market shares under alternative hypotheses. Many tools are variations of a basic 'Cournot' model that assumes logical responses by producers as customers and their competitors react to changes in prices and quantities. A key ingredient for these models is the elasticity of demand, which measures the sensitivity of consumers to price changes. Techniques have developed for estimating demand elasticities, and it is often possible to find independent papers that estimate elasticities for products ranging from electricity to alcohol. Competition authorities often use variants of Cournot models to assess the potential effects of proposed mergers on prices, so it is logical to extend the use of the models to estimate damages from claims of anticompetitive conduct in arbitration proceedings. Nevertheless, our experience has been that the models may not work well if the specific claim involves a shock to the market that is exceptionally strong in magnitude, as the empirical literature often derives elasticities based on time periods that do not involve significant market disruptions.

When determining market shares, it is important to adopt a dynamic focus. A static analysis would simply impute a value to lost market share, as if the claimant had lost the share permanently. However, if the arbitration itself puts an end to the disputed conduct, then the claimant may eventually catch up with the market share that it could have reasonably anticipated in the absence of the disputed conduct. If so, then an appropriate damage analysis should look forward over time, and consider that the lost market share will diminish with the passage of time, and eventually cease as the claimant fully regains the same position it would occupy in the hypothetical competitive scenario. It would, therefore, be reasonable to measure future damages that diminish over time; the challenge is to determine the pace of the claimant's catch-up.

With respect to catch-up, the tables reverse with respect to allegations of speculation. A respondent may ordinarily feel inclined to levy accusations of speculation, but the respondent has a natural incentive to support a damage estimate that looks into the future to project a rapid catch-up rate that reduces the total damage estimate. A respondent can legitimately complain that the greater speculation lies in a fully static analysis that refuses to contemplate future changes. If the claimant simply imputes a value to lost market share, as if it had lost the share in perpetuity, then the calculation contains an internal contradiction: the analysis presumes that disputed conduct has caused a loss in market share, without considering that the cessation of the disputed conduct could lead to a restoration of market share. We can imagine reasons why a claimant's lost market share may in fact be irreversible, but a sound analysis of damages should be able to identify and articulate the reasons.

Calculating overcharges in price-fixing and monopolisation cases

The specific claim confronting an arbitration tribunal may be that the respondent has charged an excessive price to the claimant, either as a result of the respondent's participation in a cartel or as an abuse of its dominant position. As with the discussion of market shares above, the calculation of damages requires the analysis of an alternative scenario that never occurred: one in which the respondent charged a reasonable price.

If the members of an arbitration tribunal are not themselves experts in competition law, they may look to prior decisions by competition authorities for guidance. However, tribunals should recognise limitations to the precedent. Competition commissions often have access to detailed data concerning the costs of companies involved in price-fixing and monopolisation, and respondents have an incentive to claim that a tribunal cannot award damages for overcharges unless the claimant first demonstrates that the prices charged bear no reasonable relation to underlying costs. However, arbitration tribunals may not have the ability to compel the respondent to produce detailed cost data, and must therefore strike a balance. Cost information can be useful, but it is not reasonable to insist on data if the tribunal cannot compel its production.

As an example, in the electricity industry, it is possible to estimate the costs of electricity generation using publicly available studies concerning the costs of building and operating different types of power stations. Many electricity companies use publicly available studies to create models that estimate the costs of power stations owned by competitors, which they integrate into market-wide models that provide insight into how different types of competitive behaviour will affect market prices. The models are well-suited to estimating overcharges from anticompetitive conduct, and provide a good example of a reasonable alternative to a respondent's internal cost data.

In the absence of the respondent's cost data or publicly available industry estimates, the most logical assessment of overcharging will involve a reference to a competitive benchmark. Commodities exchanges provide natural competitive benchmarks for products

ranging from metals to energy. In such cases there are two principal challenges to measuring overcharges. First involves the distinction between geographic markets. Often the price in the exchange will involve a separate geographic market than the one in dispute – the exchange may reflect effective competition by buyers and sellers, while the dominance or cartel involves reduced competition in a distinct geographic market. If the exchange does not reflect trading in the same geographic area as the disputed conduct, then the analysis of damages should determine whether and how to adjust the traded prices. Depending on the circumstances the correct answer may involve no adjustment or adding or deducting transportation costs or taxes, or considering other economic variables that can distinguish markets.

A second challenge is whether the respondent sells the product subject to other terms and conditions that render it fundamentally distinct from the contracts traded in a commodity exchange. In the natural gas industry, for example, producers have claimed that the provisions for flexibility under their long-term contracts render the product more valuable than indicated by prices on traded markets. A reasonable damage analysis will consider the possible merits of such claims, and whether an appropriate adjustment would be to raise or lower the exchange traded price when deriving a competitive benchmark for the calculation of overcharges.

Estimating an overcharge is most difficult where the product is not a commodity, and there is no independent exchange with traded prices that can provide insights into the competitive price. In such cases the best available data may come from research such as surveys, or statistics such as average import prices compiled by government agencies. If the quality of the data is not good, then tribunals should impose a greater evidentiary burden before awarding damages for overcharges. For example, if the price charged exceeds the average indicated by import data in 10 other countries, and there is no logical explanation for a premium, then the evidence would appear strong enough to create a presumption of overcharging. In contrast, showing that the price is the third or fourth highest within a sample of 10 countries might not be enough.

Claims that damage awards can distort competition

Several recent disputes have involved a perceived conflict between competition law issues and the breach of legitimate investor expectations under bilateral investment treaties. The common fact pattern involves a long-term agreement between the state and the investor, which the state then breaches. The investor claims damages for the breach, and the state responds by saying that the long-term agreement distorts competition. Examples include long-term agreements that the government of Hungary signed to purchase power from electricity generators; the government subsequently claimed that the agreements distorted competition inappropriately. Similar arguments arise in arbitrations involving aid to investors in renewable energy sources such as wind, hydroelectric and solar power. The investors allege the breach of legal obligations to provide certain levels of financial support to renewable energy, and a debate emerges over the consistency of the previous levels of financial support with European law on state aid, which is designed to avoid distortions of competition. Another example is the case brought by the Micula brothers, involving a long-term agreement in which the government of Romania offered tax benefits for a number of years in exchange for the investors' commitment to invest in an economically deprived area of Romania. As Romania approached its accession to the European Union, it decided to cancel the tax benefits prematurely, on the grounds that they distorted competition in conflict with European law.

The tribunal rejected the state's argument in the *Micula* case, deciding that an award of damages could reconcile the perceived conflict: the state had the right to terminate the agreement on competition grounds, but should still pay damages to honour the legitimate expectations of the investors under the relevant investment treaty. Nevertheless, the perceived conflict between competition law and investor expectations has re-emerged during the enforcement phase of the *Micula* case. The European Commission has published an *amicus curiae* brief explaining its view that paying damages would itself distort competition in violation of European law.

Is there really a conflict between issuing a damages award and respecting the competition concerns expressed in European law? This chapter does not claim to answer the question from a legal perspective, but offers an economic and financial analysis of the alleged conflict. The analysis engages with the concerns expressed by the European Commission, but concludes that there is no conflict between competition policy and the award of damages, as long as tribunals consider the competition issues appropriately when tasked with determining damages.

For ease of discussion we separate the competition law concerns into short-term and long-term. A short-term concern is the potential distortion of competition if the investor remains active, and has not ceased operations upon the breach of the state's agreement. If the agreement indeed distorts competition, and the investor receives full compensation as if the agreement were still effective, then the concern is that the distortion of competition will continue. However, structuring a damages award appropriately can avoid any ongoing distortion to competition. The key is to structure the award as is typical in the form of a lump-sum payment. If the investor receives a single payment, and knows that its continuing operations will not attract any ongoing support, then the investor will behave as if the agreement no longer exists, while receiving full compensation for the breach.

A simple hypothetical example can help illustrate. Assume that the breach of the investment treaty involves the cancellation of a long-term commitment to subsidise the coal used by a coal-fired power station, by \notin 30 per ton. The state argues that continuing the payments would distort competition, leading the investor to generate more electricity than warranted. The state further argues that paying the award has virtually the same effect as continuing the subsidy. However, as an economic matter, the receipt of a lump-sum award will change incentives significantly relative to the continuation of payments under the agreement.

After receiving a lump-sum award, the power station in this example must purchase coal at the market price, which by definition is $\notin 30$ per ton higher. In the future, all rational economic decisions concerning the operation of the power station will revolve around the market price of coal, so there will be no ongoing distortion of competition. The key is that the investor's compensation should not depend on the precise amount of coal actually burned going forward, but solely on the expected amount that a tribunal determined was reasonable when it approached the task of awarding damages.

We have been involved in one investor-state dispute where the tribunal declined to issue a lump-sum award for all damages, but issued a specific award concerning past damages while retaining jurisdiction to monitor the state's future conduct. The tribunal warned the state that more damages would arise every year if the state continued to breach its obligation to the investor. In that case there was no specific argument about competition law, but the case is interesting because one could argue that the contingent nature of the eventual compensation could affect the investor's incentives and ongoing management decisions: shutting down operations, for example, could interrupt the expected flow of future compensation from the state. If a tribunal adopted a similar award structure in a case that presented competition law concerns, then there would be a legitimate basis for questioning whether the award itself could distort competition in the future. However, to avoid questions over future distortions of competition, a tribunal could structure the award to address all prospective damages, fully discharging the state's continuing obligations to the investor.

We now turn to a separate long-term concern, which does not involve the potential distortion of competition from the particular investment at issue. Rather, the long-term concern is that paying the award will set an adverse future precedent. The argument is that European competition policy loses its effectiveness if a state can violate it by offering inappropriate support to investors, and then upon the detection of the violation simply cashes out the investors, so that they receive the same total support as if the support had continued. Conceivably a state that is determined to grant aid will continue to do so, and will continue to distort competition, rendering the European law ineffective.

For ease of exposition we address the long-term concerns with the same hypothetical example of subsidies to coal-fired power stations. We adapt the example to illustrate the long-term issues, by exploring the concern that paying damages to the investor in a current power station will permit the state to reintroduce future subsidies of essentially the same nature, inducing more investors to build new coal-fired power stations. The imagined future scenario involves a proliferation of coal-fired power stations by investors who have confidence in the receipt of full compensation upon the cancellation of any subsidies. If the state wants inappropriate numbers of coal-fired power stations, then the concern is that the precedent of paying damages will permit the state to attract them in continued violation of European law.

The long-term concern immediately raises questions concerning the legitimate expectations of investors in the hypothesised wave of future investments. We do not address that question, which would be a threshold liability question in the hypothesised future arbitrations. Instead, we presume that the investors in the future wave have legitimate expectations in the continued receipt of the financial support offered by the state, so that the question of damages arises again.

In the future arbitration, the tribunal needs to determine damages, and depending on the facts, the state could express several distinct concerns with the distortion of competition. One concern is that the mere offer of financial support has led to a proliferation of investments that would never have been made in a scenario of free competition. In the context of the previous example, the argument is that there should not be so many coal-fired power stations, and that their proliferation distorts competition. The tribunal can in fact assess damages in a manner that addresses the concern, and that avoids any distortion of competition from the grant of an award. That is, if the state is correct that the investor should never have undertaken the new investment, then the logical approach is to treat the case as one of full expropriation, in which the investor receives an award for the full fair market value of the plant, and transfers title to the state. The state then has the ability to shut down the new investment to avoid any distortion of competition.

A damages award can in fact give strong support for competition policy, if it clarifies the analytical framework discussed above and puts the state on notice: any future inappropriate offers of aid will expose the state to the risk of purchasing future investments outright in the form of future damage awards for expropriation, in order to pave the way for their subsequent closure. From a policy perspective it is appropriate for the state itself to bear financial responsibility for the risks that its future aid may pose to competition. Appreciating their financial responsibility, states will have a natural incentive to ensure the compliance of future policies with the competition concerns expressed in European law.

To round out the discussion, it may be useful to appreciate the implications of denying damage awards on the grounds of promoting European competition policy. Denial of an award introduces a principle of inadequate investor compensation, ostensibly justified as a tool for competition policy. Again, presuming that investors have formed legitimate expectations in response to a state's policies, it is inefficient to start compensating investors inadequately to steer the state's future conduct away from fostering investment and towards competition policy. It is, in fact, possible to foster investment while respecting competition policy simultaneously, and while punishing states for a failure to implement competition policy.

A more nuanced case is one in which no question arises concerning the existence of the future investments, but with respect to the prices that investors charge or their levels of output. Below we consider a case where some aid serves valid goals such as environmental or regional development goals, but the concern is that the total amount of aid exceeds the appropriate level, presumably distorting competition. Specifically, with respect to the coal example, perhaps there is no question concerning the desirability of building future coal-fired power stations in a particular location, but the concern is that excessive aid leads a wave of future investors to burn too much coal and to sell too much electricity at too low a price in the power market. Here, again, an appropriate analysis of damages can resolve any perceived conflict between legitimate investor expectations and competition policy.

In most cases, an extended period of time passes in between the termination of the financial agreement, which prompts the arbitration, and the assessment of damages. In the above example, assume that the state reduces the support to the investor, ostensibly in the view of protecting competition policy. At that point, the investor is on notice concerning the new level of support considered appropriate. We explore two possibilities: the first is that the state is correct, and the new reduced level of support meets the legitimate goals of competition policy. If so, then once the investor perceives the new reduced level, its incentives will change and it will scale down its output, possibly by selling at a higher price in response to the receipt of less support.

The measurement of damages in such a case will inevitably compare two scenarios: the 'but-for' scenario, in which continued support translated into higher output, and an 'actual scenario', with the appropriate, reduced level of support. If the investor is actually engaged in a strategic game that undermines the legitimate goals of competition policy, then an appropriate damages award would be able to detect the inappropriate conduct, and make the investor responsible. In such a case, economic and financial analysis could determine that the investor has not responded rationally to the economic incentives associated with the new reduced level of aid. The analysis could show if the investor is continuing to produce a higher level of output after the termination of the support, perhaps in the hope of maximising damages. The natural framework of damages already permits the state to explore such a possibility, under the principle of mitigation. That is, if aid distorts competition policy and leads to excessive output, then by implication, rational economic behaviour should involve lower output upon the reduction of the aid to the appropriate level.

If the investor has continued to produce at a high level of output, despite the reduced aid, then the state should be able to demonstrate that the investor is not mitigating damages. A reduction in the total damages award would implicitly shift responsibility to the investor for the output decision that lies within its control. To be more specific, assume that the aid on offer was a subsidy of €30 per ton to the purchase of coal, while an appropriate level of aid was only €20 per ton. If €30 per ton was excessive and €20 per ton is a superior level of aid from the perspective of competition policy, it can only be because a profit-maximising decision by a rational investor in response to the receipt of €20 per ton involves less output than under the prospective receipt of €30 per ton. If the investor has responded reasonably to the reduction in support, then it is actually mitigating damages while simultaneously satisfying the state's concerns over competition policy. Given appropriate mitigation, the investor should have an entitlement to full compensation. As explained earlier, structuring the damages award as a lump-sum payment will compensate the investor, while ensuring a continued rational response to the new lower level of aid.

If, on the other hand, the investor does not respond to the appropriate, lower level of aid, then it will be producing more output than is rational. The investor will not be mitigating its damages, and an appropriate damages award will again resolve any perceived conflict between legitimate expectations and competition policy, as the tribunal will measure damages by imputing to the investor a rational response that the investor in fact failed to provide.

Earlier in the discussion, we explained that it is poor policy to introduce the notion of inadequate investor compensation as a tool to steer the state's conduct. However, from an economic perspective it makes sense to respect the legitimate expectation of the investor while making it responsible for the decisions that lie within its control. Once the state corrects an inappropriate level of aid, the investor should get full compensation but only as long as it follows rationally the economic signals provided under the new policy.

Note that the damages analysis in this example should continue to project the equivalent of the \notin 30 per ton in the but-for scenario, despite our assumption for the purpose of discussion that the \notin 30 per ton is excessive from a competition policy perspective. The state may urge the tribunal to award damages based on a but-for scenario that assumes an allegedly appropriate support level of only \notin 20 per ton. However, any such argument is simply a way of denying liability, pointing to zero damages by collapsing the level of support in the but-for scenario with the level available in the actual scenario. Implicitly, such an argument asserts the primacy of competition policy, denying the legitimate expectation of the investors, which represents a liability issue. However, the concern of this chapter is what to do if the investor has a legitimate expectation, and if so, whether the award of damages creates tension with competition policy. The answer is that there is no need to assert the primacy of competition policy, since the principle of appropriate compensation in fact avoids any conflict between investment treaty obligations and competition policy. We only offer some limited observations on the liability issue of investor expectations. Economics can play a useful role in assessing the legitimacy of investor expectations. Specifically, when specific contracts or legislation appear unclear, economic policy analysis can supplement legal argument to shed light on whether it makes sense to interpret certain arrangements as embodying long-term commitments to investors. A state may argue that it was not reasonable for the investor to expect a long-term commitment to a particular policy like the \in 30 per ton in the example above, because a long-term commitment would have constrained the state's discretion. However, investment treaties inherently presume that long-term commitments, as opposed to unbridled state discretion, ultimately benefit both the investor and the state. Nevertheless, the final answer often depends on a combination of specific legal and economic analysis.

In conclusion, it does not undermine competition policy to award damages under an international investment treaty. As long as tribunals structure awards as lump sums, the awards do not affect the economic incentives surrounding future pricing and output. Nor does a damages award inherently set an adverse precedent that will tempt states to undermine their obligations to fulfil the competition policies embodied in European law. In fact, the principle of adequate compensation makes states financially responsible for any future steps that may undermine competition policy. Awarding damages will ultimately make competition policies may cause to competition. In contrast, it makes little sense to introduce a policy of inadequate investor compensation as a tool to steer the state's future behaviour. If an investor does not respond adequately to the correction of future economic signals that distort competition, then the concept of mitigating damages already provides an appropriate tool for holding the investor responsible for an inadequate response.

Appendix 1

About the Authors

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Carlos Lapuerta is an expert in economic analysis and financial valuation, which he frequently applies to estimate damages as an expert witness in international arbitration proceedings, including many disputes between investors and sovereign states over the alleged breach of bilateral investment treaties. He offers particular experience in the analysis of investments and contracts in the energy sector, and has provided testimony in several arbitration proceedings concerning the prices in long-term energy contracts. Within the energy sector, his work has covered natural gas, coal, electricity and oil.

Mr Lapuerta also offers extensive experience with the analysis of competition, including the development of competition in markets subject to liberalization and deregulation, allegations of anticompetitive conduct such as price fixing, and the competitive impacts of proposed mergers. His work on competition has been primarily in the energy sector and the financial services sector.

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Richard Caldwell is an economics and financial expert, with experience valuing businesses and financial instruments across a range of industries, from energy to banking to telecoms, and in a range of settings. He frequently provides economic and financial advice to private clients and expert testimony in litigation. His advice covers the areas of corporate finance and valuation, the pricing of securities and derivatives, and assessments of competition and regulatory issues. Richard has testified before the UK Competition Appeals Tribunal on the level of returns for network companies, and on damages and financial issues before tribunals set up under the rules of the Energy Charter Treaty, the London Court of International Arbitration, the International Centre for Settlement of Investment Disputes, UNCITRAL, Dutch Law and Swiss Law.

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