Global Arbitration Review

The Guide to Damages in International Arbitration

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Assessing Damages for Breach of Contract

Ermelinda Beqiraj and Tim Allen[1]

Introduction

Picture the scene. Your business makes luxury chocolates and you have entered a contract to install a new state-of-the-art production line in your factory. The installation goes disastrously wrong and your factory has to operate with significantly reduced capacity for three months while the problem is fixed. You manage to hire some inferior alternative equipment but you are faced with a stack of customer orders you cannot fulfil, perishable stock you cannot use, high levels of customer returns and a vastly reduced income. Twitter and the trade press are alive with rumours of customers defecting to other suppliers and the potential demise of your business. Luckily, your contract with the equipment supplier means that you can sue for what you have lost, but how do you work out how much that is? Your losses are likely to include one or more of the following:

- Loss of profits: you have lost the profits you would have earned had the production line operated as planned.
- Wasted costs: you have spent significant sums on short-term hire of alternative production equipment. You also had a lot of employees sitting around doing nothing because the factory was operating at reduced capacity.
- Loss of opportunity: despite earlier assurances that the business was yours, a potential customer heard you were having problems and denied you the opportunity to pitch for a lucrative new contract. In addition, you were unable to undertake a planned expansion into a new market because all of your management time and energy was focused on dealing with the crisis.

Valuation of all of the above losses requires consideration of the counterfactual or 'but for' scenario. In other words, what would the financial performance of the business have been

1 Ermelinda Beqiraj and Tim Allen are partners in PricewaterhouseCoopers LLP's UK disputes practice.

had the new production line been commissioned on time and operated as specified? What revenues would have been earned, what costs would have been incurred and what costs would have been avoided? The difference between the counterfactual and what actually happened gives rise to the damages incurred. While determining the actual performance of the affected business should be relatively straightforward, assuming that suitable contemporaneous accounting records are available, constructing the 'but for' scenario requires informed professional judgement and this is generally an area where damages experts may differ. The reasonableness of the assumptions underlying the 'but for' scenario and the extent to which they can withstand scrutiny based on the available evidence is often tested during cross-examination.

In this chapter, we will explain some of the challenges that damages experts, lawyers and tribunals need to deal with when valuing damages in breach of contract claims that do not involve company valuations.

Causation

The causal relationship between the breach and the losses flowing from the breach is a matter for the lawyers to argue and the tribunal to determine. However, it is also critically important to the assessment of damages.

A common problem is the existence of more than one potential cause for the loss suffered. It would be naïve to assume that a causal link exists just because a loss occurs around the same time as a breach. To return to the example of our chocolate manufacturer, let us assume that around the same time as the botched installation of the production line there was a poor cocoa harvest leading to shortages in supply and increases in the prices of cocoa. The damages expert is faced with the challenge of identifying and isolating the various different causes of loss. To what extent would profits have been reduced or sales lost as a result of this cocoa supply issue and irrespective of any contractual breach? For those sales that the expert concludes would have been made in the 'but for' scenario, forecast profits would need to be adjusted to take into account the increased price of raw materials as a result of the shortage, to the extent that these cannot be passed on to the end customer.

External factors may have an effect on damages that was not necessarily foreseeable at the time of the breach. Disentangling the effects of the global economic crisis in order to isolate and assess the impact of a breach has been a common feature of breach of contract disputes arising since 2008, particularly in the energy sector. For example, a 10-year forecast of profits from an oil and gas concession prepared in December 2008 would look very different from a similar forecast prepared six months earlier.

While causation is primarily a legal and factual issue, it has a direct and potentially significant impact on the assessment of damages. If experts make different assumptions or are given different factual information or instructions regarding the causal link between a breach of contract and a sequence of events, this can lead to vastly different assessments of damages. In such cases, we would advise tribunals to ask the parties' experts to provide alternative calculations that illustrate the impact on the loss calculation of changes to the assumptions made. Armed with these, tribunals can adjust the calculation of damages to reflect the tribunals' views on causation.

Establishing a clear causal link between the contractual breach and the loss incurred is also important in wasted costs and loss of opportunity claims.

In cases of lost opportunity, the claimant needs to demonstrate that the opportunity existed and, but for the breach of contract, they would have won it before they can start estimating what that opportunity was worth.

Every case is unique and many have unusual features: in one case we had to value lost profits from an oil rig that could only operate under certain weather conditions, so we had to use weather maps to plot the likely pattern of cash flows. The 'right answer' in each case will derive from legal, factual and then financial analysis.

Identification of the difference in profits arising from the breach

A lost profits calculation will compare what actually happened to what would have happened but for the breach. The 'actual' profits should be available from the claimant's records. Rarely, an expert may be faced with a total lack of accounting records: if the company holding the accounting records has been liquidated and all of its records have been lost or destroyed, it can be very difficult, if not impossible, to quantify a claim. In such circumstances, an expert may have to look at secondary evidence (e.g., from other businesses that are similar to the business in question or other sources).

More commonly, while there is financial information available in the accounting records of the business, it may be difficult to retrieve or insufficiently detailed: a system designed to record and report information helpful to management in running their business day to day may be inadequate to support a claim for breach of contract.

In analysing records to support a lost profits claim, an expert may find that income and costs from several different projects are aggregated within the accounting system; central costs may need to be analysed and split between different activities; or it may be unclear which costs are incurred as a direct result of the breach and which would have been incurred anyway. Even after a review of detailed underlying documents it may be difficult to ascertain the nature of some of the costs incurred: invoices 'for services rendered', for example, are particularly unhelpful.

The 'but for' scenario may well rely on contemporaneous forecasts, budgets or comparison to a previous period of trading unaffected by the breach. In determining whether such forecasts are suitable as a basis for the determination of 'but for' profits (or revenue and costs), an expert and tribunals need to assess how reliable the forecast is and whether there are facts or circumstances that may not have been known at the time the forecast was prepared, but were known at the time of breach, that may need to be reflected in the 'but for' calculations.

In assessing whether contemporaneous forecasts are sufficiently reliable to serve as a basis for 'but for' profit (or revenue and costs) one needs to consider the purpose for which the forecast was prepared, among other things. For example, contemporaneous forecasts (prepared at the start of the year for the following year) by a management team that has a track record of forecasting reasonably accurately may be considered reliable. By contrast, a forecast produced by an inexperienced or new management team, one produced for an entirely new product or one that is at odds with available information (e.g., market forecasts) may be less suitable as a starting point for the expert to build a 'but for' scenario. The quantum expert needs to assess the quality and suitability of such forecasts using his or her professional judgement and experience, and where appropriate make adjustments to the forecast to arrive at an appropriate 'but for' calculation.

Consequential loss claims can be more difficult to assess than wasted costs or lost profits claims, particularly if they involve an element of uncertainty, such as the loss of an opportunity. In this situation, contemporaneous evidence concerning the nature of the opportunity and the likelihood of the claimant winning is more relevant than accounting records. To return to our chocolate manufacturer, an expert assessing the value of the lost opportunity to pitch for a new contract might seek to establish the probability of the claimant winning the work by examining the claimant's historical track record in similar bid situations, assessing any relevant evidence as to the claimant's relationship with the potential customer and reviewing factual evidence as to the extent of the competition. Ultimately, as with all aspects of damages quantification, an element of judgement will be required.

Future losses

Future losses tend to be more problematic to assess than past losses. A forecast of profits and cash flows over a 20-year contract term into the future is inevitably more speculative than an assessment of losses already incurred. However, this does not mean that the claimant's situation is hopeless. Swatch, for example, was awarded the equivalent of some US$450 million in a claim against Tiffany, which largely related to future losses over the term of a joint venture agreement. So what marks the difference between success and failure for future loss claims?

As a general rule, the more evidence there is of the ability to generate future cash flows and profits, the lower the chance of a claim being dismissed as speculative. The nature of the industry and the stage of development of a project are important factors in this. For example, participants in the mining or oil and gas industries might base a claim for future losses on the level of proven reserves. A contemporaneous business plan and forecast of profitability over the term of the contract may be more compelling than a bespoke model put together by the expert solely for the purpose of assessing the claim, but even contemporaneous forecasts should still be allied to an accurate forecasting track record, a well established market for the product and a credible commercial means of bringing the product to market. If infrastructure was already in place and agreements signed with future customers, these factors will contribute to a robust and defensible calculation.

The types of business most likely to experience difficulty with claims for future losses are those whose plans were at an early stage of development when the breach of contract took place. For example, say you had bought the right to a trademark allowing you to manufacture and sell a particular brand of luxury good. The financing deal you had arranged collapsed and you sue the bank involved for the profits you would have made from the product globally. In terms of evidence, all you may have is the right to a trademark, a two-page business plan and a great idea. Technology start-ups are similarly vulnerable, particularly if they are trying to enter new markets with an innovative but untested product where the size of the market itself is very difficult to determine. In such circumstances, the expert will have to make a significant number of assumptions in valuing lost profits and should consider what evidence might be available from other sources besides accounting records and forecasts; for example, the record of other similar businesses, results from the sale of a similar product produced by the business or a competitor, or published industry sector data.

Where a forecast for future lost profits relies on untested assumptions, a tribunal may prefer to consider a loss based on a wasted costs approach rather than entertain a claim for lost profits. However, this does not mean a claim based on future profits from a business in an early stage of development will never succeed. For example, in *Al-Kharafi v. Libya*, the claimants were awarded some US$900 million following the termination of an agreement to build a hotel and shopping mall, despite the fact that there had been no trading activity and the ground had yet to be broken as at the date of termination.

Has the claimant really lost profits?

In some circumstances, the expert should consider whether profits have been lost at all, notwithstanding the court or tribunal's finding of contractual breach.

In *Pope & Talbot Inc v. Canada*,[2] the claimant claimed lost profits arising from a seven-day shutdown of its three mills as a result of Canada's wrongful conduct. However, the tribunal rejected the claim on the basis that 'the Investment at all relevant times had inventory sufficient to meet all its sales requirements, notwithstanding that shutdown' and 'the Investment suffered no loss of profits from the shutdown because it was always able to meet the needs of its customers on a timely basis.'

When the BBC libelled Oryx Natural Resources in 2001, wrongly suggesting that the diamond mining company was channelling cash to the al-Qaida terrorist network, it caused significant immediate reputational damage before the BBC issued an apology and retraction. However, one can see an argument that the diamonds were still in the mine and could and would be sold at a later date. The issue then becomes one of compensation for delay to, rather than absolute loss of, profits. Similar considerations may apply to claims for delay in construction of assets with a known usable life; for example, a two-year delay in constructing a processing plant with a 25-year working life does not necessarily mean that two years' profits have been lost; instead, those profits have been delayed by two years.

In *Celanese International Corp v. BP Chemicals Ltd*[3] in the Patents High Court, the claimant's patent was found to be valid and to have been infringed. Despite the claimant's expert assessing damages at an excess of US$180 million, the judge held that the illegal use of the patent did not increase the defendant's profits and that the requirements of the defendant's customers could have been met at little or no additional cost using a non-infringing process. In other words, the patent, although infringed, was of no value to the defendant.

Wasted costs

In wasted costs claims, the claimant may have had the foresight to record separately any additional costs incurred. For example, in claims related to delays or disruption to construction projects, the claimant may have recorded what it considers to be additional costs separately. But are all these additional costs the fault of the respondent or were other sub-contractors or the claimant itself to blame? If the respondent clearly caused part of a problem but not all of it, is it possible to isolate and allocate the costs accurately? If the

2 Arbitration under the North American Free Trade Agreement, award on damages dated 31 May 2002, paragraph 84.

3 *Celanese International Corp & HNA Holdings Inc (formerly Hoechst Celanese Corp) v. BP Chemicals Ltd & Purolite International Ltd* 1998.

expert does not have sufficient information to enable him or her to make reasonable assumptions as to apportionment of wasted costs between those that arise as a result of the breach and those that do not, such costs may be considered unprovable.

In some cases, the identification of wasted or incremental costs can be relatively straightforward. Imagine a single purpose entity formed to operate a concession agreement that was wrongfully terminated. The costs incurred by that entity in dealing with the aftermath of the termination should be simple to quantify and the expert may not need to be concerned with matters of allocation and apportionment. In other cases, it can be difficult to separate incremental costs incurred as a direct result of the breach from costs that would have been incurred whether the contract was breached or not. A common example of this is wasted management time. If you are going to pay your managers anyway, can you get back the time they spend on the claim? How does the expert assess whether the costs are incremental? And what about research and development costs? Did they relate purely to the breached contract or did they have wider application within the company? What would be a fair proportion to include?

In *Pope & Talbot Inc v. Canada*,[4] the tribunal denied a claim for the cost of management time devoted to the claim on the basis that the management were paid annual salaries that 'did not vary in respect of the issue or matters to which each of them devoted his or her working time' and 'would have been paid no matter what work related activities those managers undertook'.

By contrast, in *Pegler v. Wang*,[5] a case in the English High Court relating to a failed IT system implementation, the claimant was successful in recovering wasted management time. Pegler claimed £1 million in respect of time spent investigating and installing additional hardware and software to remedy some of Wang's breaches, and investigating an integrated replacement system. The judge allowed half of the amount claimed, taking what he described as 'a broad-brush approach', despite a lack of detailed records.[6] This appears to have been awarded on the basis that the time was diverted from the managers' proper job of managing the company and that this represented a loss.

Date of valuation, period of loss and use of hindsight

The date of valuation and period of loss are often clear-cut; for example, you could have a whole factory shut down for a known period or lose the right to exploit mineral or oil reserves for a set period of time. However, these matters can be in dispute between the parties, particularly if the breach is ongoing, and if so, that can have a significant impact on the claim. In our chocolate example, while the problems with the production equipment were remedied after three months, the impact of these problems on the company's reputation and market share may have lasted many months or years.

A damages assessment at the wrong date or over the wrong period can have a serious impact and may lead to the expert report being dismissed as irrelevant.[7] The choice of valu-

4 Award on damages dated 31 May 2002, paragraph 82.

5 *Pegler Ltd v. Wang (UK) Ltd* [2000] EWHC Technology 137 (25th February, 2000).

6 *Pegler Ltd v. Wang (UK) Ltd*, paragraphs 335 to 348.

7 In *Casado v. Chile* (May 2008) the tribunal dismissed the claimant's expert report on the grounds that it was based on a valuation date prior to the provisions of the relevant treaty coming into force. In the *Yukos*

ation date is particularly significant where cash flows are affected by movements in factors such as interest, inflation rates and exchange rates, or commodity prices that can fluctuate significantly over time.

Alongside the valuation date, one issue that often arises is the use of hindsight in valuations carried out at the date of breach. For example, let us assume a 20-year concession agreement to operate an airport was terminated in 2012. At that time, the relevant authority had announced plans to build a high-speed rail link to the nearest city, significantly increasing the relative attractiveness of the airport compared to other destinations. Two years later, following a change of government, the high-speed rail link was cancelled. A valuation of the concession agreement at the date of termination (without the use of hindsight) might reasonably value the airport on the basis of passenger forecasts anticipating the rail link. This might be challenged by a respondent on the grounds that shutting one's eyes to what has happened between the date of breach and the date of hearing may lead to the claimant being overcompensated. Experts should seek advice from their instructing legal team as to whether the use of hindsight is appropriate; in our experience this varies depending on the exact facts of each case and on the law applicable to the claim.

Other matters

Aside from assessing the various components of loss and determining the quantum of each accordingly, the quantum expert and tribunals may have to deal with a number of other issues that can have a significant effect on the amount of damages. These include corporate structuring issues, mitigation, contributory negligence, interest and tax.

Issues arising from the claimant's corporate structure

In some cases, the claimant may not be the entity in which the loss initially occurred. In such situations, the expert needs to establish whether the losses that arise in a different entity flow dollar for dollar to the claimant. A joint venture vehicle could suffer a loss but currency restrictions or tax laws might mean that the 'but for' lost profits reaching the owners of the joint venture by means of a dividend payment would have been significantly reduced. Complex corporate group structures are another challenge. Companies can be structured to maximise tax efficiency across the group: recharges between group companies may lead to particular companies in a group structure not making any profit. The expert will need to understand the impact of these measures on the cash flows in the counterfactual to assess the extent to which the value of damages is affected by the group structure.

The allocation of shared service costs between different parts of a business or across a group may also present valuation difficulties, particularly if the related accounting records are sketchy or there is doubt as to whether such costs are truly incremental.

Mitigation

The claimant has a duty to take reasonable steps to mitigate its loss. The extent to which the claimant has fulfilled this duty and the nature of the measures to be considered as mitigation

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arbitration, neither claimants nor respondent had performed valuations on the dates the tribunal found to be relevant. The tribunal therefore had to do the valuations itself (Final Award, 1782).

are matters of law. Damages experts need to work closely with their instructing counsel to identify mitigating activities and assess the cash flows that should be taken into account in mitigation of any damages claim. In the example of our chocolate manufacturer, the claimant incurred incremental costs by hiring alternative equipment. Had the claimant failed to do so, however, this would have resulted in more unfulfilled orders, higher lost profits and might be considered a failure on the part of the claimants to adequately mitigate their loss.

Contributory negligence

A finding of contributory negligence can lead to a reduction in a damages award. For example, the installation of a new IT system may result in a breach of contract, but what if the customer contributed to some of the problems by significantly changing its requirements at a late stage? The reduction in the damages award may be a specific sum if that is possible based on the evidence or a more arbitrary percentage. In *MTD Equity v. Chile*, for example, the tribunal reduced the claimants' damages award by 50 per cent to reflect '[the claimants'] decisions that increased their risk in the transaction and for which they bear responsibility'.[8]

Interest

Interest can form a significant proportion of the compensation eventually received by the claimant and may even exceed the value of damages itself. In PwC's 2015 research into the quantum of damages in international arbitration,[9] we found that while interest comprised 24 per cent of the value of awards (on average), only some 10 per cent of the pages in the award are devoted to the subject. The topic of interest is the subject of a separate chapter in this book. Insofar as it relates to a breach of contract claim, one issue that needs to be carefully assessed in determining the amount of interest is the timing of the difference in cash flows between the 'but for' and actual scenarios. Unlike claims involving company valuations, which typically calculate damages at a single date (and interest from that date onwards), claims related to loss of profits and wasted costs will calculate loss that may span a period of months or years. To arrive at an accurate figure for interest, a damages model must identify at what point in time each cash flow difference occurs and apply interest only from that date on that portion of loss. If the effect is unlikely to be significant, it may be appropriate to calculate interest on monthly or even annual cash flows to simplify the calculation.

Taxation

Tax laws can affect the value of the award. Where the rate of tax applicable to profits is the same as the rate of tax applicable to a damages award, then the damages claim can be calculated on a pre-tax (or grossed up) basis because the same amount of tax would be paid whether the claimant made profits or received damages. Care should be taken, however, to ensure that any claim for interest on the tax payable for the award is calculated in line with the underlying cash flows. For example, say a claimant lost US$100 pre-tax in 2010,

8 *MTD Equity Sdn Bhd and MTD Chile SA v. Republic of Chile*, paragraph 242.

9 www.pwc.co.uk/forensic-services/disputes/insights/assets/pdf/2015-international-arbitation-damages-research.pdf.

on which he would have paid US$20 tax. He makes a claim that is settled in 2016 and he then pays US$20 tax on the damages received. He would be due interest on US$80 (not US$100) from 2010 until the date of payment of the award. Interest on the tax element of the claim would be due only if the tax on the award would be payable before payment of the award itself, and in such a case only from the date of payment of the tax on the award.

If there is a difference in the way in which damages are taxed and the way in which profits are taxed (as, for example, in Switzerland), the valuation of damages has to start with a post-tax calculation of lost profits and then adjust for the amount of tax payable on the damages awarded.

Conclusion

Many of the issues that an expert encounters in the course of calculating damages are similar, regardless of the cause of the action or type of damage suffered. While an ability to understand and evaluate accounting information is, of course, essential, the expert must also bring sound commercial and professional judgement to bear in constructing a robust counterfactual based on the evidence available.

No expert can hope to navigate these complexities alone. It is the combination of documentary evidence, evidence from witnesses of fact and other experts as well as clear instructions from the legal team that will feed into the calculation of damages and help the expert to establish a robust assessment of the loss.

Tribunals face an even tougher job when evaluating expert evidence on damages to determine an appropriate award. There are a number of ways in which tribunals can help themselves. Engaging with the expert process early, for example, in setting the issues or questions that expert evidence should address, asking the parties' experts to explain the reasons for the differences between their opinions and expert witness conferencing, among others, can go a long way to help tribunals reach a fair damages award.

Appendix 1

About the Authors

Ermelinda Beqiraj
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Ermelinda Beqiraj is a partner in PwC UK specialising in the provision of expert evidence on financial and valuation issues in litigation and international arbitration, with a particular focus on disputes arising from transactions. She has over 15 years of experience as a forensic accountant during which time she has been involved in the assessment of losses in numerous cases.

Ermelinda has been recognised as a leading damages expert witness in international arbitration by *Who's Who Legal*. She has been responsible for investigating and quantifying damages in arbitration and litigation cases involving clients in a range of industry sectors including power generation and utilities, mining, transport and construction, among others. She also regularly advises corporate and private equity houses in disputes arising from transactions such as breach of warranty claims, completion accounts and earn-out disputes. She has a particular focus on disputes arising in CEE, Russia and CIS.

Tim Allen
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Tim acts as an expert on loss and valuation issues in a wide range of disputes and industries, with over 25 years' experience of in excess of 130 expert assignments. He specialises in substantial cross-border disputes taken to arbitration and has acted as expert in international arbitration proceedings brought under ICC, UNCITRAL, LCIA, ICSID and AAA rules, as well as disputes in the English High Court, the English Criminal Court, the Competition Appeals Tribunal, the US Courts (State and Federal) and in Hong Kong. He has testified on numerous occasions. He has been involved in disputes arising from breaches of contract, acquisition disputes and claims arising out of investment treaties in telecoms, mining, oil and gas, power generation, financial services and manufacturing.

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