



CRA Insights: International Arbitration

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Implementation issues in setting prejudgment interest

The appropriate benchmark for determining the rate of prejudgment interest on arbitral awards is a source of ongoing dispute. The economic and legal merits of various alternatives have been explored in the literature, including in a recent *Journal of International Arbitration* paper by the authors.¹ In this note, we discuss implementation issues for two commonly advocated approaches to prejudgment interest: the respondent's borrowing rate and the risk-free interest rate.

The respondent's borrowing rate

Some argue that the prejudgment interest rate should be the respondent's borrowing rate – i.e., the rate on the respondent's traded debt securities or other measures of the respondent's cost to borrow.² As described by its proponents, a respondent's borrowing rate is the rate that would be demanded by an investor purchasing the claim at the time of harm: "the compensation claim has precisely the characteristics of a marketable debt instrument, and accumulation of damages at the defendant's debt rate is appropriate."³ There are a number of implementation issues that need to be addressed in applying this standard toward a calculation of prejudgment interest.

First, a respondent may have different outstanding debts along a continuum of seniority. There must be a judgment as to which debts are comparable in seniority and security to the award. This depends on several factors, including the legal status of the award in various jurisdictions, the award's enforceability, the respondent's willingness and ability to pay, and the award size relative to the respondent's other obligations.

¹ Aaron Dolgoff and Tiago Duarte-Silva, "Prejudgment interest: An economic review of alternative approaches," *Journal of International Arbitration*, Issue 33-1, 2016. <http://www.kluwerlawonline.com/abstract.php?area=Journals&id=JOIA2016004>.

² See, e.g., James M. Patell, et al., "Accumulating Damages in Litigation: The Roles of Uncertainty and Interest Rates," *Journal of Legal Studies*: Vol. 11: No. 2, 1982; Jeff M. Colón & Michael S. Knoll, "Prejudgment Interest in International Arbitration," *Transnational Dispute Management* 6, (2007); *Teco Guatemala Holdings, LLC v. Republic of Guatemala*, ICSID Case No. ARB/10/23, Claimant's Memorial (Sept. 23, 2011); *Cargill Incorporated v. United Mexican States*, ICSID Case No. ARB(AF)/05/2, Award (Sept. 18, 2009).

³ See Patell, et al., *supra* note 2.

Second, the award date is not known at the time of harm and is difficult to estimate. It is therefore difficult to select an appropriate debt maturity rate to use as a prejudgment interest rate. Also, the appropriate borrowing rate should reflect the uncertain timing of an award. If, for example, an award is made five years after the date of harm, it would not be appropriate to use hindsight to measure the five-year borrowing rate as of the date of harm (e.g., the yield on a five-year bond) because such a rate would include a term premium – i.e., a higher rate of interest tied to longer maturity loans.⁴ The appropriate borrowing rate would not include this term premium and instead use a measure that reflected short-term borrowings rolled over at regular intervals. This approach not only avoids payment of term premiums, but also allows the borrowing rate to be periodically updated to reflect the changing default risk of the respondent.⁵

Third, the borrowing rate used for prejudgment interest should reflect an expected rate of return rather than a promised rate of return. On an ex ante basis, the coupon rate charged will be greater than the investor's expected return because the latter reflects the potential for both favorable and unfavorable outcomes. For example, a 15% loan with a 1/3 probability of default might be expected to earn 10% on average.⁶ The rate charged is sometimes described as the promised rate, as it reflects the borrower's promise to repay the loan in full. If interest is assessed at the promised return, then ex post the claimant will have been compensated at a rate greater than the expected return on a debt claim, and in a way that reflects compensation for risk that did not materialize. For risky loans the expected rate of return is less than the promised rate of return, with the difference between the two increasing with the degree of default risk.

Fourth, how should the borrowing rate be determined in the absence of market data on the price of the respondent's actual debts associated with the award? In theory, one might try to benchmark to the prices of debts for similar credit risks. For example, if the respondent has a credit rating available, one could look to the borrowing rates for entities with similar credit ratings. However, credit rating is a crude measure and not often available, so this may lead to some degree of judgment regarding respondent's true borrowing rate, or, more specifically, the borrowing rate associated with the award itself.⁷

Fifth, the borrowing rate may be related to the award itself. The appropriate cost of debt should reflect the marginal cost of the debt associated with the award, not the respondent's average cost of debt. For example, for awards that are sufficiently small, it is conceivable there is virtually no default risk and a risk-free rate of interest is appropriate. Larger awards might themselves contribute to greater likelihood of default. Economists would describe the borrowing rate as endogenous to the award decision, thus complicating any estimation of that rate. On a more practical level, it is important to consider award-related collectability factors that might contribute to greater or lower borrowing rates. An award is typically not secured by collateral, but it might have easier collectability provisions when compared to unsecured loans.

⁴ Under the hypothetical where the claimant sells its claim at the time of harm, given the uncertain timing of any settlement or award, the claimant should not accept a price discount reflecting a term premium.

⁵ Under the hypothetical that the claimant sells its award claim at the time of harm, the hypothetical purchase price would reflect the respondent's expected default risk over the expected time until award payment.

⁶ That is, $10\% = 15\% * 2/3 + 0\% * 1/3$. Assuming, for simplicity, no recovery in case of default.

⁷ It is also worth noting that the interest rate should be measured using instruments that are in the same currency denomination as the award.

The risk-free interest rate

At the time of harm, the claimant has been deprived of something of value. This also deprives the claimant of any risks associated with that value. For example, if the claimant has been deprived of the net present value of an investment project with payoffs sometime after the date of harm, then the claimant has also been deprived of any variability of those payoffs due to the investment activity's inherent risk. Therefore, the risk-free interest rate compensates only for the time value of money.

There are some issues in the application of a risk-free rate of interest to prejudgment interest. First, there is a question of which securities measure the risk-free rate of interest. The most commonly used securities are US Treasury securities, given the recognized creditworthiness of the US government and the liquidity of the markets for those securities. Alternatively, the risk-free rate may be measured using other securities deemed to be particularly low risk, such as short-term money market rates or interest rates on bank certificates of deposit.

Second, for a given issuer deemed sufficiently risk-free, what maturity security should be used? As noted in our discussion of the respondent's borrowing rate above, given the variability in the timing of the award (ex ante) and the need to avoid compensating for risk premiums, it would make sense to use short-term securities rolled over – for example, four-week Treasury bill yields, measured either daily or monthly. Use of longer term maturities risks compensating for term premiums embedded in the security's price as of the damages date is another possibility.

Third, the interest rate should be measured using instruments that are in the same currency denomination as the award. Because interest rates reflect currency-specific expected rates of inflation, it is inappropriate to apply interest rates from one currency toward award amounts in another currency. Whenever appropriate award-currency interest rates are not available, it may be possible to convert interest rates from one currency to another.

Conclusion

We reviewed the implementation of two measures of prejudgment interest: the respondent's borrowing rate and the risk-free interest rate. The discussion above highlighted various issues that warrant care in implementation. That said, the risk-free interest rate is the simplest to implement and, as we argue elsewhere, also an economically justified measure of prejudgment interest.

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