Contract Damages

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Contract Damages

- When a contract is breached, how should the breaching party compersate the breached-against party?

- Issue is not on insisting contract be performed, but on efficiency.

- For example, when the cost of a product has soared after signing contract, so that cost of delivery exceeds benefit, on efficiency ground the contract should not be executed.

- How should the contract be framed and, if not possible ex anxe, how damages should be measured ex post, to implement efficiency?

Different Measures of Damages

- Expectation damages: The amount of remedy which would put the breached-against party in the same position he would have been if the contract had been executed.

- Reliance damages: The amount of remedy which puts the breached-against party in the same position had he not entered into the contratural relationship.

- Restitution damages: The amount on remedy which equals to sum of benefits the breached-against party has confered upon the breaching party.

- Liquidated damages: The breaching party pays the breached-against party an amount which has been agreed upon in advance.

- Liquidated damages differs to the other three in that the remedy is specified by the contracting parties, rather than the court.

Example (from Polinsky)

- A seller (S) produces a product at cost \$150.

- The product's value to buyer 1 ($B1$) is \$200.

- Before using the product, $B1$ needs to spend a contract-specific investment of \$10.

- Before delivery (and after investment), there is a chance that another buyer, $B2$, might also want to buy it.

- Value of the product to $B2$ can be either \$180 or \$250.

- Contract price is P.

- Suppose P is paid in advance.

- Naturally, $P \in [150, 190]$.

- Fully specified efficient contract: Deliver to $B1$ if $B2$'s valuation is \$ 180, and to $B2$ if his valuation is \$250, with S returning P to $B1$, and $B1$'s investment of \$10 compensated by $B2$.

- Generally, not all contingencies are foreseeable, so that contract cannot be fully specified (i.e, will be incomplete).
- What breach remedy rule implements efficient outcome?

Example (Expectation Damages)

- $B1$ is expected to benefit \$200 from completion of contract.

- Expectation remedy is therefore \$200.

- Suppose the price of product, if sold to $B2$, is P_1.

- If breaching, the payoff of S is

$$P + P_1 - \$200 - \$150.$$

- If deliver to $B1$, payoff of S is $P - \$150$.

- Breaching is better if

$$P + P_1 - \$200 - \$150 - (P - \$150) > 0,$$
$$i.e., P_1 > \$200.$$

- This occurs only if $B2$'s valuation is \$250.

- Expectation damages facilitate efficient contract.

- Note that if $B2$ also has to spend \$10 for the contract, then expectation damages replicates efficient contract.

- Under expectation damage, the payoff of $B1$ is \$200-\$10=\$190 regardless of whether the good is delivered to him.

Example (Reliance Damages)

- $B1$'s reliance expenditure is $P + \$10$.

- Reliance damages is then $P + \$10$.

- Payoff of S when breaches is

$$P + P_1 - (P + \$10) - \$150.$$

- Payoff of delivery to $B1$ is $P - \$150$.

- Breaching is better if

$$P + P_1 - (P + \$10) - \$150 - (P - \$150) > 0,$$
$$i.e., P_1 - P - \$10 > 0.$$

- If $B2$'s valuation is \$180, and, for example, $P_1 = \$170$ and $P = \$155$, then $P_1 - P - \$10 = \$5 > 0$.

- There is possibility of inefficient breach.

- Can also be inefficient retain of original contract.

- Note that S will not breach if

$$P_1 - P - \$10 < 0.$$

- If B_2's valuation is \$250, but $P_1 = \$162$ and $P = \$155$, then the item should be sold to B_2 but will not.

- This inefficiency, however, less likely in reality, as P is already pre-set but P_1 is yet to be negotiated when B_2's valuation is known to be \$250.

- Reliance remedy does not implement efficient contract.

Example (Restitution Damages)

- The benefit $B1$ confers upon S is P.

- The benefit of S if he breaches is then

$$P + P_1 - P - \$150.$$

- Benefit of delivering to $B1$ is $P - \$150$.

Example (Restitution Damages)

- Breaching is better if

$$P + P_1 - P - \$150 - (P - \$150) > 0,$$
$$i.e., P_1 - P > 0.$$

- Restitution remedy encourages inefficient breach even more than reliance remedy.

- However, restitution damages make it less likely that a contract should be breached but does not.

Example (Liquidated Damages)

- Suppose remedy for breach, when S breaches, is P_2.

- Benefit of delivery to $B1$ is $P - \$150$.

- Benefit of breach is $P + P_1 - P_2 - \$150$.

- Breach is not worthwhile *iff*

$$P - \$150 - (P + P_1 - P_2 - \$150) > 0,$$
$$i.e., P_2 - P_1 > 0.$$

- Note that $P_1 \in [150, 180]$ when $B2$'s valuation is \$180, and $P_1 \in [150, 250]$ when valuation is \$250.

- Let $P_2 = \$200$. Then $P_2 - P_1 > 0$ when $B2$'s valuation is \$180. Also, S and $B2$ can always negotiate a price P_1 above $P_2 = \$200$ if $B2$'s valuation is \$250.

- Liquidated damages implements efficient contract.

- Since liquidated damages tries to replicate an efficient contract by pre-writing clause into contract, it always implement efficiency if all contingencies are anticipated.

Influence on Reliance Expenditures

- Suppose after entering into contract, $B1$ can make an additional investment of \$24 to increase the product's value by \$30.

- The product's value to $B2$ is \$180 with $2/3$, and is \$250 with probability $1/3$.

- Not efficient for $B1$ to make the additional investment under efficient contract: $\$30 \times \frac{2}{3} < \$24$.

- If S and $B1$ can sign complete contract, they will include provision that $B1$ not make the reliance investment.

- Unlikely in reality.

Influence on Reliance Expenditures (Expectation Damages)

- If $B1$ does not spend the additional \$24 investment, expectation damages will be \$200.

- If $B1$ spends the \$24, expectation damages will be \$230.

- Additional investment of \$24 gives $B1$ an additional payoff of \$30. No matter contract is breached or not. $B1$ therefore will make the (inefficient) additional investment under expectation damages.

Influence on Reliance Expenditures (Reliance Damages)

- $B1$ will reap additional \$30 of product's value if \$24 additional investment is spent, when product is delivered.

- $B1$ will be returned the \$24 if contract is breach.

- Investing in \$24 is dominant strategy: $B1$'s payoff increases by \$6 if contract is executed (Prob. 2/3), and by \$0 if not (Prob. 1/3).

Influence on Reliance Expenditures (Restitution Damages)

- Under restitution remedy, $B1$ is compensated by amount he confers upon S, which is P.

- $B1$ therefore internalizes the cost and benefit of the additional investment.

- Restitution remedy is efficient r.w.t. reliance investment.

Summary

- Expectation and liquidated remedies are efficient w.r.t. efficiency of breach.

- Restitution remedy is efficient w.r.t. reliance investment.

- No breach remedy is always efficient.

The Influence of Risks

- Suppose $B2$'s valuation now takes only two values; \$250 or \$0.

- There is no question about breach when realization is \$0: item will be sold to B1 regardless of damages.

- Can concentrate on allocation of risks.

- Assume private insurance is not availbable, so allocation of risks is determined by remedy.

- S should bear all the risks.

- Expectation damages suffices: S pays $B1$ \$200 ($B1$'s value attached to the good) in the event of breach.

- $B1$'s payoff is always \$190.

- Reason for efficiency is easy: The very purpose of expectation damage is to ensure $B1$'s payoff even contract is breached.

- The profit of S will be $P - \$150$ if good delivered to $B1$, and $P - \$150 + P_1 - \$200$ if to $B2$.

- None other damages efficiently allocates risk except liquidated damage.

Case II: Buyer 1 risk neutral, seller risk averse

- $B1$ should bear all the risks.

- Achieved by making S pay $B1$, in the case of breach,
  the amount P_1.

- The profit of S is then $P - \$150$ if contract not breached,
  and $P - \$150 + P_1 - P_1 = P - \$150$, if breached.

- $B1$'s profit is $\$190 - P$ if not breached,
  and $\$190 - P + P_1$ if breached.

- None other allocates risk efficiently except liquidated damages.

Case III: Both risk averse

- Should share risks.

- Achieved by making remedy payment between \$200 and P_1.
  The more risk averse $B1$, relative to S, the closer to \$200 (i.e.
  the lower) the remedy should be.

Effects of Remedies

- Expectation remedy allocates risks efficiently only if buyer is risk averse and seller risk neutral.

- Reliance remedy cannot achieve efficiency of risk allocation: Remedy is less than $200.

- Restitution remedy in this example corresponds to contract price, which is below $200. It therefore cannot achieve efficiency of risk allocation.

- Since liquidated remedy is negotiated by buyer and seller in ex ante, they can always negotiate a remedy that fits their need of allocation risks.
- For example, if the risk attitude is such that S and $B1$ they want to equally split the possible benefit of $B2$'s higher offer.
- Let $P = \$175$. If $B2$'s valuation turns out to be $\$250$, then S delivers the good to $B2$ with price $\$250$, by paying the remedy of $\$225$.

- Profit of S: \$25 if deivery to $B1$, and
  $175 - 150 + 250 - 225 = 50$ if delivery to $B2$.

- $B1$'s profit: \$15 if receiving the good, and
  $225 - 175 - 10 = 40$ if not.

- The joint profit of $B2$'s \$250 being realizing is \$50, and the remedy makes S and $B1$ to share it equally.
  ($S: 50 - 25 = 25$; $B1: 40 - 15 = 25$.)