

ECON 522 - CONTRACT LAW PART 2

(Reliance, Investment in Performance, Default Rules)

I Reliance

Reliance is the investments made by the promisee to improve the value of the contract (e.g. a hangar for a plane, or furniture for a new house). The main point in our analysis of reliance is that it's very difficult to design an enforcement mechanism that provides incentive for both efficient reliance and efficient breach. Once again the problem is externalities, which we'll discuss below.

If the promisee has relied at all, then clearly the expected benefit of the contract increases for the promisee (recall the airplane and hangar example: if I don't get my plane, then the hangar isn't worth anything to me, but my plane is worth a lot more to me if I have a hangar to put it in). However, if we include reliance in expectation damages, then people will *over-rely*.

The reasoning is as follows: if I know that any dollar that I invest in reliance is going to give me my expected return with probability one (with certainty), then I will invest as if the probability of breach is zero. However, if the probability of breach is not zero (there's some probability that the contract will be broken by the promisor), then the promisor is forced to pay me for my investment, at no cost to me. Thus every dollar that I decide to invest in reliance imposes a negative externality on the promisor. Since I don't have to pay at all for that negative externality, I will over-rely.

Solution: Don't include reliance in expectation damages. If reliance is not included in expectation damages, then every dollar that I invest in reliance only gives a return if the contract is not breached. Thus I pay the total cost of any investment in reliance; I internalize the externality, so that I rely the efficient amount. However, excluding reliance from expectation damages means the promisor does not fully internalize the cost of breach, and thus breaches too often. Cooter and Ulen say that we should use *perfect expectation damages*—damages based on the efficient amount of reliance—to fix this problem, but in reality the efficient amount of reliance is usually impossible to determine. Actual courts instead award damages based on *foreseeable reliance*, only including damages that the promisor reasonably could have foreseen.

Example. I sign a contract with Monona Terrace to hold a conference there next August. After signing the contract I decide to start planning the event, and I must choose how much to invest in advertising for the conference. I can spend \$500 worth of my time sending emails to other economists, most of which will go unread, or I can spend \$5000 printing posters to send to other economics departments, where they will be posted on the walls, forcing prospective attendees to look at them on the way to their offices. If the conference ends up happening, I expect the benefit to me of emails to be \$1500, while the benefit of posters is expected to be \$7000 (this is not net of cost). Suppose there is some probability $1 - p$ that Monona Terrace will realize they double booked the conference hall and breach the contract.

1. Given the probability of breach $1 - p = 30\%$, how is it efficient for me to advertise? Suppose transaction costs are high. What will I choose to do if expectation damages include reliance? What will I choose to do if expectation damages do not include reliance?
2. Would the answer to (i) change if there were no transaction costs?
3. What would the probability of breach need to be for the other advertising method to be efficient?

Answers

1. The efficient ad is the one with the highest expected positive payoff. The expected payoff is:

$$\begin{aligned} & (\text{Payoff from ad given contract upheld}) \times (\text{Probability contract upheld}) \\ & + (\text{Payoff from ad given contract breached}) \times (\text{Probability contract breached}) \end{aligned}$$

For posters this is:

$$(7000 - 5000)(.7) - 5000(.3) = -\$100$$

Clearly not efficient. For emails this is:

$$(1500 - 500)(.7) - 500(.3) = \$550$$

Thus emails are the efficient choice. However, if expectation damages include reliance, then I'm comparing a return of \$2000 for posters to a return of \$1000 for emails, thus I choose the inefficient posters, since I do not pay the loss if there is a breach of contract, and high transaction costs mean we cannot negotiate to reach the more efficient outcome. If expectation damages do not include reliance, then I'm comparing a payoff of -\$100 for posters to \$550 for the emails, thus I would choose the efficient newspaper ad.

2. If transaction costs are low then the Coase Theorem applies, just as it did when we were studying property law. This means that we will *always* reach the efficient allocation (as long as the "rules to the game" are clearly defined). When expectation damages do not include reliance then I choose the efficient ad, so there is no need to bargain. However, when expectation damages include reliance then there are gains from trade if Monona Terrace and I negotiate:

If I buy posters, the social payoff is -\$100. If I send emails the social payoff is \$550. Thus the **potential gains from trade** are \$650. My **threat point** is \$2000 = my payoff from posters. Monona Terrace's threat point is $.3(-7000) = -\$2,100$. This is because with a 30% probability they breach the contract and must pay me \$7,000 to give me a \$2,000 payoff. If we **split the gains**, we should each get \$325 above our threat points:

$$\text{My Payoff} = \$2,325$$

$$\text{Monona Terr. Payoff} = -\$1,775$$

The **price** that gets us here solves the following equation:

$$\text{My Payoff} = \text{My Payoff from emails} + \text{Price}$$

Thus:

$$2,325 = 1,000 + \text{Price}$$

$$\text{Price} = \$1,325$$

Alternatively (and equivalently), the price would have to solve the following equation:

$$\text{Monona Terr. Payoff} = \text{MT Payoff from emails} - \text{Price}$$

Thus:

$$-\$1,775 = .3(-1500) - \text{Price}$$

$$\text{Price} = -450 + 1,775 = \$1,325$$

3. It would have to be that

$$1500p - 500 < 7000p - 5000$$

$$4500 < 5500p$$

$$\frac{45}{55} < p \approx 82\%$$

II Investment in Performance and Penalty Defaults

Investment in performance is investment to reduce the probability of breach. If expectation damages include reliance, then a promisor will invest the efficient amount in performance, whereas if reliance is not included in expectation damages then there will be under-investment in performance. But we saw earlier that we need reliance not to be included in expectation damages for efficient reliance; this is called the *paradox of compensation*.

Example

As activities coordinator of the Economics department graduate student association, you have been tasked with organizing the department's annual winter party. You contract with a professional DJ service to provide the music. The DJ service must choose which of its two employees to send to your event:

- Tom shows up with probability $\frac{1}{2}$
- Evan shows up with probability $\frac{2}{3}$ but costs the service an additional \$55

The winter party will make the department \$300 better off as currently planned. However, you have the opportunity to make reliance investments:

- You can purchase an additional keg of cheap beer for \$175 or quality microbrew for \$250
- These investments will increase the value of the party to the department by \$300 and \$390 respectively

If the DJ fails to show up, you will get nothing from these investments, because everyone will leave the party. The keg purchases available to you and the DJs available to the service are common knowledge.

In summary:

Contract	without reliance, gives you \$300 benefit
DJs	Tom, shows up with $p = \frac{1}{2}$ Evan, shows up with $p = \frac{2}{3}$, costs DJ service \$55
Extra Kegs	Cheap beer, \$175 for \$300 benefit Microbrew, \$250 for \$390 benefit

1. What is the efficient choice of DJ and reliance?
2. What will you and the DJ service choose to do if reliance is included in expectation damages?
3. What will you and the DJ service choose to do if reliance is not included in expectation damages?
4. Is social surplus higher when reliance is included or not included?

Solutions.

1. Social surplus is expected benefits minus expected costs. Let R be the benefit of reliance, c_R be the cost of reliance, and c_{DJ} be the extra cost, if any, of hiring the DJ. Then social surplus can be calculated as

$$p(300 + R) - c_R - c_{DJ}$$

This yields surplus amounts as follows:

	No extra keg	Cheap beer	Microbrew
Tom	150	125	95
Evan	145	170	155

So Evan and an extra keg of cheap beer are efficient.

2. When expectation damages include reliance, you always get the benefit of reliance, since either the contract is performed and you get the benefit or breach occurs and the benefit you would have gotten is included as part of damages. So your payoffs are

$$300 + R - c_R$$

The DJ service's payoffs are

$$-(1 - p)(300 + R) - c_{DJ}$$

Then payoffs are as follows, letting the DJ service be player 1:

	No extra keg	Cheap beer	Microbrew
Tom	(-150, 300)	(-300, 425)	(-345, 440)
Evan	(-155, 300)	(-255, 425)	(-285, 440)

Microbrew is a dominant strategy for you; knowing this the DJ service will send Evan. So the Nash equilibrium is (Evan, Microbrew).

3. When expectation damages do not include reliance, your payoffs are now

$$300 + pR - c_R$$

and the DJ service's are

$$-(1 - p)300 - c_{DJ}$$

Then payoffs are as follows, again letting the DJ service be player 1:

	No extra keg	Cheap beer	Microbrew
Tom	(-150, 300)	(-150, 275)	(-150, 245)
Evan	(-155, 300)	(-155, 325)	(-155, 310)

Sending Tom is a dominant strategy for the DJ service; knowing this you will not rely. So the Nash equilibrium is (Tom, No Extra Keg).

4. Looking at our table of social surpluses, we can see that social surplus is higher when reliance is included (and we get Evan and a keg of microbrew). If we think of the change in damages due to reliance as being a gap in the contract, then this is the efficient default rule to fill that gap.

III Default Rules

A *default rule* tells the court what to do when a contract fails to specify what should happen in some contingency. Such an omission is called a *gap*, and they are inevitable; it's not feasible to include every possible contingency in a contract. We've considered two types of default rules, as well as regulations:

- A *efficient default rule* is an attempt to fill a gap with the rule the parties would have wanted, had they thought to specify it. Such rules work well when gaps exist due to a high transaction cost of filling them, and not due to strategic omission.
- A *penalty default rule* is an attempt to fill a gap with a rule the parties would not have wanted in order to encourage the parties to disclose information and fill the gap with something efficient. Such rules may work well when gaps are left for strategic reasons.
- *Regulations* are like default rules, but can't be negotiated around.

Let's return to the party example, but this time suppose that, before you sign the contract, the DJ service is unaware that you might purchase an additional keg.

1. If reliance is included in expectation damages, are you likely to tell the DJ service about this contingency?

Probably not:

- You can bargain over a fee as if no reliance might take place (say you split the gains from trade, so you would pay \$225) then turn around and rely (increasing your payoff to \$465).
- If you mentioned this possibility, then you could write (Evan, Cheap Beer) into the contract, but if you again split the gains from trade you would end up with a payoff of $\frac{1}{2} \left(\frac{2}{3}(600) - 55 - 175 \right) = 85$.

2. What if it is not included? Assume that it is possible to specify who will DJ your event in the contract.

Yes, you would: If you don't mention the reliance, they will send Tom, and so you won't rely. This isn't efficient; you know that there are further gains from trade to be split between you, and so you will disclose the possibility of reliance.

So when the gap in the contract is left strategically—you don't tell the DJ service that your department might buy more beer, because doing so would change the terms of trade in their favor—even though *after the contract is written and the DJ service finds out about your keg purchases* including reliance in expectation damages is efficient, not including reliance in expectation damages leads to a better contract in the first place. This is an example of a penalty default: after the gap is left, the rule is not even constrained efficient, but instead leads to the gap not being left in the contract when it's written.