

**EC337 – Economic Analysis of Legal Issues
Spring 2013, Boston University**

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Second Mid-term Test – Solutions

Wednesday, March 27, 2013

This is a 38-minute test. There is a total of 38 points allocated across two questions. Use the number of points allocated to each part as a suggestion for how long to spend on that part. I recommend that you attempt all parts before using more time than is suggested for any one part. If you complete some parts in less than the suggested time, use your extra time to revisit parts you may have had trouble with the first time through and to check your work.

Please read the questions carefully and write your answers in the blue booklets provided. Please follow my instructions at all times.

You only need to identify yourself with your BU ID on the blue booklets. You may keep this question sheet when the exam is over.

1. [25 points total, 5 parts] Ivan will be hosting an event at his home on Saturday. On the preceding Wednesday, a pipe at his home breaks. If the pipe is not fixed, he will have to cancel the event, which will cause him to miss out on \$2000 in certain profit. He calls Joe, who is the only plumber available. Ivan and Joe enter a contract that states that Joe will fix the pipe on Saturday morning and Ivan will pay Joe \$500. On Friday, Qiao offers Joe \$1000 to fix her hot tub on Saturday. If Joe accepts this offer, he will have to breach his contract with Ivan.

a) [4 points] Is it efficient for the contract between Ivan and Joe to be breached? Explain briefly.

answer:

Surplus with no breach: 2000 profit minus 500 plumbing cost for Ivan; 500 revenue for Joe; 2000 total.

Surplus with breach: 0 profit and 0 plumbing cost for Ivan; 1000 revenue for Joe; 1000 total.

No, it is not efficient for the contract to be breached, since the total surplus is higher under performance (2000) than under breach (1000).

b) [5 points] Assume that Joe knows that courts always employ the “expectancy” remedy rule when a breach of contract is found, and that Joe and all courts know exactly how much profit Ivan stands to earn from hosting the event. Will Joe decide to breach the contract? Explain briefly.

answer:

Ivan expects his profit net of the plumbing cost to be 1500 under contract performance, but gets 0 if there is a breach. So Joe will have to pay Ivan 1500 under the expectancy rule if he breaches.

After breaching, receiving 1000 from Qiao, and paying 1500 in damages to Ivan, Joe would be left with $1000 - 1500 = -\$500$.

No, Joe will not decide to breach, since his private surplus from doing so (-500) is less than his private surplus from performing the contract as written (500).

c) [5 points] Assume instead that Joe knows that courts always employ the “expectancy” remedy rule when a breach of contract is found, but also knows with certainty that the court will make a mistake and estimate the profit Ivan stands to earn from hosting the event at \$800. Will Joe decide to breach the contract? Explain briefly.

answer:

If the court is convinced that Ivan would earn \$800 from hosting the event, it will rule that his expectancy under the contract was this profit minus the \$500 plumbing cost, or \$300, and order Joe to pay this amount as compensation for breaching.

After breaching, receiving 1000 from Qiao, and paying 300 in damages to Ivan, Joe would be left with 700.

Yes, Joe will decide to breach, since his private surplus from doing so (700) is greater than his private surplus from performing the contract as written (500).

d) [5 points] Suppose instead that, on Friday afternoon, Ivan learns that Joe has agreed to fix Qiao's hot tub on Saturday, and that Joe will hence breach his contract with Ivan. Ivan manages to get the case brought in front of the court immediately. Assume that the court orders specific performance. Will Ivan's event be held as planned on Saturday? Explain. [You may assume that there are no legal or constitutional issues preventing the court from ordering specific performance. This is not a trick question.]

answer:

By ordering specific performance, the court is telling Joe that he must perform the contract with Ivan as written. But that doesn't mean it will actually happen, since the parties could in principle come to a mutually beneficial bargain in which Ivan's pipe does not get fixed and his event is hence canceled.

To agree to such an outcome, Ivan would need to be compensated by at least 1500, which is the utility he is expecting under contract performance that the court order guarantees to him at a minimum (net of the 0 he would get if his event is canceled). But the most that Joe would be willing to pay is 500, which is the extra amount he would receive from Qiao after breaching (1000) net of what he would earn from simply performing the contract (500).

Since there is no feasible bargaining range, it is not possible for the parties to bargain around the specific performance order in this case. So yes, Joe will fix the pipe, and Ivan's event will be held as planned.

e) [6 points] Go back to assuming that Joe knows that courts always employ the "expectancy" remedy rule when a breach of contract is found, and that Joe and all courts know exactly how much profit Ivan stands to earn from hosting the event. However, suppose that it is common knowledge that an alternative location has become available at which Ivan can hold his event unchanged and as planned if he pays a rental fee of \$900. Just considering Ivan and Joe, now is it efficient for the contract between them to be breached? Will Joe decide to breach? Explain.

answer:

Now, if Joe breaches, Ivan can move his event to the new location and still hold it as planned. In this case, Ivan's private surplus would be $2000 - 900 = 1100$, and Joe's would be 1000 (from Qiao), for a total social surplus of 2100. Under performance of the original contract, the total

social surplus would still be 2000. So yes, it is now efficient for the original contract to be breached ($2100 > 2000$).

Ivan's expectancy under the contract is 1500, but under a breach, instead of being stuck with 0, he now has a better option that would leave him with 1100. So the compensation Joe would be ordered to pay would be the amount that would bring Ivan from 1100 up to his expected 1500, i.e. \$400.

After breaching, receiving 1000 from Qiao, and paying 400 in damages to Ivan, Joe would be left with 600.

Yes, Joe will decide to breach, since his private surplus from doing so (600) is greater than his private surplus from performing the contract as written (500).

2. [13 points total, 4 parts] Suppose that a director named Tarantino makes a film called *Reservoir Dogs* that bears a suspicious stylistic resemblance to an earlier film by a director named Lam called *City on Fire*. Before *Reservoir Dogs* was made, Lam was earning \$30,000 per year and Tarantino was earning \$10,000 per year, and this would continue indefinitely if *Reservoir Dogs* were not released. If, on the other hand, *Reservoir Dogs* is released, Lam would earn \$5,000 per year and Tarantino would earn \$135,000 per year thereafter.

a) [4 points] Briefly state the fundamental trade-off that is faced when deciding on the strength of intellectual property protections in general.

answer:

Giving producers of creative goods some monopoly power allows them to charge a higher price for such goods than they otherwise could, and therefore gives them a stronger incentive to produce such goods. But the wide availability of creative goods can be very beneficial in generating further creativity and other surplus, and such further benefits might be suppressed if existing creative goods are too expensive to access.

b) [2 points] In the present case of Tarantino and Lam, what is the efficient outcome? Why?

answer:

Total social surplus with both films: $135 + 5 = \$140k$.

Total social surplus with only *City on Fire*: $30 + 10 = \$40k$.

The efficient outcome is for both films to be released, since this leads to the highest social surplus.

Suppose that Lam sues Tarantino for copyright infringement.

c) [3 points] Will efficiency be achieved if the court upholds Tarantino's right to release *Reservoir Dogs* and be free of any liability to Lam? Explain.

answer:

Lam can either choose to silently abide by the court's decision and earn \$5k, or can attempt to bribe Tarantino to suppress *Reservoir Dogs*. Lam would be willing to pay up to \$25k for such a bribe (the difference between the 30 he would earn without *Reservoir Dogs* and the 5 he would earn with it). But Tarantino would require a bribe of at least \$125k (the difference between the 135 that the court ruling guarantees him and the 10 he would earn if he suppressed *Reservoir Dogs*). Since no bargain is possible, Lam's only feasible choice is to do nothing. So yes, both films will be released, which is the efficient outcome.

d) [4 points] Will efficiency be achieved if, instead, the court issues an injunction against Tarantino and orders him to suppress *Reservoir Dogs*? Explain.

answer:

Tarantino can either choose to silently abide by the court's decision and continue to earn just \$10k, or he can attempt to bribe Lam to allow him to release *Reservoir Dogs*. Tarantino would be willing to pay up to \$125k for such a bribe (the difference between the 135 he stands to earn if *Reservoir Dogs* is released and the 10 he would earn if it is not). Lam would require a bribe of at least \$25k (the difference between the 30 that the court order entitles him to and the 5 he would earn if *Reservoir Dogs* is released).

This bargaining range is very large, so the two parties should be able to reach a mutually beneficial bargain. Transaction costs would have to be enormous to interfere, so it seems reasonable to assume that the bargain will be made.

So yes, Tarantino will choose to bargain with Lam because this will lead to his highest private surplus, and both films will be released, which is the efficient outcome.