

1. You provide legal and financial advice to a client who has lucked into the following investment opportunity. There exists a property that currently has tenants paying a total rent of \$120,000 per year and their rental rates are locked in for the next five years. At the end of the five year period, rents will be allowed to reset to meet market levels which are projected to be \$200,000 per year and are expected to grow at 7 percent per year in real terms after that forever. The owner of this property offers your client the right to buy the property. For idiosyncratic reasons, your client, if she were to purchase this property, must sell it after five years (e.g., to conform to some new conflict of interest/ethics rules proposed for individuals in her position). A reasonable estimate of the risk associated with the rental payments over the 5 year period suggests a discount rate of 10 percent per year. After the five year period, the appropriate annual discount rate is 15 percent. Assume that your estimates of all the relevant parameters are in line with those of the market generally. For the sake of this problem, assume that discount rates only reflect risk (i.e., we assume away impatience/opportunity cost considerations, inflation expectations, etc.).

1.a What is the maximum purchase price you would suggest for the property?

1.b Assume now that the current rental proceeds are \$120,000/year but they are not locked in, so they are expected to grow at 7 percent per year in perpetuity. Assume the appropriate discount rate is 15 percent. Your client must still sell the property after the five year period. Again assume that your parameter estimates are in line with market expectations. What is the maximum purchase price you would suggest for the property?

2. You represent an insurer whose client lost a \$12 million judgment in a medical malpractice proceeding. In your jurisdiction, the defendant is allowed to pay out a judgment like this in equal payments over a 20 year period using a statutorily defined annual discount rate of 4 percent. After legally committing to pay the judgment according to the annuity terms laid out above but before any payments are made, insurance regulations in your state change restricting the insurer to making investments that, in expectation, will generate a 3 percent return per year (and the regulation is locked in for a minimum of 20 years). Nothing restricts the insurer from offering to “buy out” the annuity it originally chose to pay, but the plaintiff is free to reject any such offer (subject to the assumptions made below).

2.a Do you suggest to your client to make a buy out offer? Assume that the defendant can only ever make one buyout offer and the plaintiff must reject or accept it (i.e., can't make counter-offers). What buyout offer do you suggest if you know that the plaintiff can make a risk free return of 5 percent per year?

2.b Continue to assume that, for various reasons, the plaintiff has investment options available that provide a risk free rate of return equal to 5 percent. In a

jurisdiction where the defendant can make a single buyout offer and the plaintiff has one chance to make a counter-offer (at which point, if the defendant rejects the counter-offer, both parties are stuck with the original installment payments until the judgment is satisfied), will the plaintiff accept the offer you calculated in 2.a or will he/she make a counter-offer? If the plaintiff makes a counter-offer, what will it be?

3. Public finance scholars have noted that taxing investment returns symmetrically (i.e., including investment gains as income in the total income calculation and applying tax rate n [where $0 < n < 1$] to the total income and allowing investment losses to be deducted from total income which is then taxed at rate n) leads to a reduction in the variance of an investor's investment returns relative to the case where investment income and losses are not subjected to taxation. Prove this claim.

4. Some have suggested that firms with large blockholders (i.e., an entity that controls a significant, though not necessarily a majority, fraction of a firm's shares/votes) will generally exhibit lower agency costs than those firms with a very diffuse ownership structure. Further, among firms with blockholders, it has been suggested that firms with hedge funds (which tend to be managed by individuals who, in addition to generally holding shares of the fund itself, are paid performance fees on the order of 20 percent in addition to management fees equal to 2 percent of the fund's value) as their blockholder tend to exhibit lower agency costs than firms with mutual funds (whose managers generally receive fees on the order of 1 to 3 percent of the fund's value) as their blockholders. Provide some arguments in support of these claims.

5. In the case of *Dura Pharmaceuticals v. Broudo* (2005), the Court suggested that the demonstration of "loss causation" as an element of a securities fraud action requires a corrective disclosure with respect to the underlying fraud. That is, the Court implied that isolating a price change resulting from the fraudulent statement may not be sufficient for demonstrating loss causation. Instead, plaintiffs need to present evidence of a price change occurring after the market is made aware of the fact that the original statement was fraudulent. Some analysts have suggested that this holding will lead to firms clustering unrelated negative disclosures with any eventual corrective disclosures. Explain why *Dura* may have this effect, drawing upon the event study framework that is used in securities fraud cases.

6. Choose one of the preceding questions (1-5) to count double, or elect to have each question count equally in your final score. Note that failure to communicate which choice you make will result in you automatically losing 1/6 of the possible points available.