

REFERENCES

- Abdolmohammadi, M. and J. Sultan. 2002. Ethical Reasoning and the Use of Insider Information in Stock Trading. *Journal of Business Ethics* 37: 165-173.
- Ali, M., H. Cecil and J. Knoblett. 2001. The Effects of Tax Rates and Enforcement Policies on Taxpayer Compliance: A Study of Self-Employed Taxpayers. *Atlantic Economic Journal* 29: 186-202.
- Alm, J., B. Jackson and M. Mckee. 1992. Estimating the Determinates of Taxpayer Compliance with Experimental Data. *National Tax Journal* 45: 107-114.
- Beck P., J. Davis and W. Jung. 1991. Experimental Evidence on Taxpayer Reporting Under Uncertainty. *The Accounting Review* 66 (3): 535-558.
- Becker, G. 1968. Crime and Punishment: An Economic Approach. *Journal of Political Economy* 76 (2): 169 – 217.
- Burns, J. 1999. Insider – Trading Rule Revisions Expected From SEC. *Dow Jones News Service*, (December 14).
- Dunkelberg, J. and D.R. Jessup. 2001. So Then Why Did You Do It. *Journal of Business Ethics* 29: 51-63.
- Fischer, C., M. Wartick, and M. Mark. 1992. Detection Probability and Taxpayer Compliance: A Review of the Literature. *Journal of Accounting Literature* 11: 1-46.
- Ghosh, D. and T. Crain. 1996. Experimental Investigation of Ethical Standards and Perceived Probability of Audit on Intentional Noncompliance. *Behavioral Research in Accounting* 8 Supplement: 219-244.
- Grasmick, H. and D. Green. 1980. Legal Punishment, Social Disapproval and Internalization as Inhibitors of Illegal Behavior. *Journal of Criminal Law and Criminology* 71: 325 – 335.
- Grasmick, H. and W. Scott. 1982. Tax Evasion and Mechanisms of Social Control: A Comparison with Grand and Petty Theft. *Journal of Economic Psychology* 2: 213-230.
- Kahneman, D. and A. Tversky. 1979. Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 47 (2): 263-292.
- Ma, YL and HL Sun. 1998. Where Should the Line be Drawn on Insider Trading Ethics?. *Journal of Business Ethics* 17 (Jan): 67-75.

Marsden, JR and YA Tung. 1999. The Use of Information Technology to Develop Tests on Insider Trading and Asymmetric Information. *Management Science* 45 (August): 1025 – 1040.

Mason, R., and L. Calvin. 1984. Public Confidence and Admitted Tax Evasion. *National Tax Journal* 37: 489-496.

McCarthy, F.T. 2000. The Cost of Inequity: The Cost of Insider Trading. *The Economist* (January 22).

Newkirk, T. C. and M. A. Robertson. Speech by SEC Staff: Insider Trading – A U.S. Perspective, September 19, 1998.

Randall, D. M. and M. F. Fernandes. 1991. The Social Desirability Response Bias in Ethics Research. *Journal of Business Ethics*: 805-817.

Reall, M., J. Bailey and S. Stoll. 1998. Moral Reasoning "On Hold" During a Competitive Game. *Journal of Business Ethics* 17: 1205-1210.

Salter, S. B., D. M. Guffey, and J. J. McMillan. 2001. Truth, Consequences and Culture: A Comparative Examination of Cheating and Attitudes about Cheating among U.S. and U.K. Students. *Journal of Business Ethics* 31: 37-50.

Schepanski, A., R.M. Tubbs, R.A. Grimlund. 1992. Issues of Concern Regarding Within- and Between-Subjects Designs in Behavioral Accounting Research. *Journal of Accounting Literature* 11: 121-150.

Scott, W. and H. Grasmick. 1981. Deterrence and Income Tax Cheating: Testing Interaction Hypothesis in Utilitarian Theories. *The Journal of Applied Behavioral Science* 17 (3): 395-408.

SEC Written Statement Concerning Regulation Fair Disclosure, May 17, 2001, Given to Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises Committee on Financial Services United States House of Representatives.

Seyhun, N. 1992. The Effectiveness of the Insider Trading Sanctions. *Journal of Law and Economics* 35: 149-182.

Snoeyenbos, M. and K. Smith. 2000. Ma and Sun on Insider Trading Ethics. *Journal of Business Ethics* 28: 361-363.

Tittle, C. R. 1980. Sanctions and Social Deviance, The Question of Deterrence. Praeger Publishers.

U.S. Securities and Exchange Commission (SEC). 2001. Insider Trading. Available at: <http://www.sec.gov/answers/insider.htm>.

TABLE 1
Demographic Summary of Subjects

Gender

| | Frequency | Percent |
|--------|-----------|---------|
| Male | 67 | 63.8 |
| Female | 38 | 36.2 |
| Total | 105 | 100 |

Family Income Level

| | Frequency | Percent |
|---------------------|-----------|---------|
| Under \$20,000 | 29 | 27.6 |
| \$20,000 - \$40,000 | 24 | 22.9 |
| \$40,000 - \$80,000 | 27 | 25.7 |
| Over \$80,000 | 24 | 22.9 |
| Missing | 1 | 1.0 |
| Total | 105 | 100 |

Past Trading Experience

| | Frequency | Percent |
|----------------------------|-----------|---------|
| Past Trading Experience | 48 | 45.7 |
| No Past Trading Experience | 57 | 54.3 |
| Total | 105 | 100 |

Full Time Work Experience

| | Frequency | Percent |
|------------------|-----------|---------|
| Less than 1 year | 51 | 48.6 |
| 1 - 2 years | 16 | 15.2 |
| 2 - 5 years | 25 | 23.8 |
| 5 - 10 years | 12 | 11.4 |
| Over 10 years | 1 | 1.0 |
| Total | 105 | 100 |

Undergraduate Degree

| | Frequency | Percent |
|---------------------|-----------|---------|
| Accounting | 35 | 33.3 |
| Finance | 17 | 16.2 |
| Management | 3 | 2.9 |
| Marketing | 3 | 2.9 |
| Information Systems | 5 | 4.8 |
| Other Business | 10 | 9.5 |
| Non-Business | 32 | 30.5 |
| Total | 105 | 100 |

TABLE 1 - continued
Demographic Summary of Subjects

Current Degree Program

| | Frequency | Percent |
|------------------------------------|-----------|---------|
| Masters of Business Administration | 30 | 29.1 |
| Masters of Accounting | 51 | 48.6 |
| Other | 22 | 21.0 |
| Total | 105 | 100 |

Number of Times Insider Trading Has Been Read or Discussed in Classes

| | Frequency | Percent |
|-------------------------|-----------|---------|
| Never discussed | 24 | 22.9 |
| Discussed 1-2 times | 28 | 26.7 |
| Discussed 3-5 times | 32 | 30.5 |
| Discussed 5-10 times | 13 | 12.4 |
| Discussed over 10 times | 8 | 7.6 |
| Total | 105 | 100 |

Number of Times Heard or Read about Insider Trading in News Media

| | Frequency | Percent |
|---------------|-----------|---------|
| Never | 5 | 4.8 |
| 1-2 times | 8 | 7.6 |
| 3-5 times | 14 | 13.3 |
| 5-10 times | 21 | 20 |
| Over 10 times | 57 | 54.3 |
| Total | 105 | 100 |

Length of Time Lived in United States

| | Frequency | Percent |
|------------------|-----------|---------|
| Less than 1 year | 13 | 12.4 |
| 1 - 2 years | 10 | 9.5 |
| 2 - 5 years | 6 | 5.7 |
| 5 - 10 years | 0 | 0 |
| Over 10 years | 76 | 72.4 |
| Total | 105 | 100 |

TABLE 2
Test of Understanding of Insider Trading

This table shows the correct responses to the 4 questions at the bottom. These questions were used to verify that the subjects had the required knowledge of insider trading to meaningfully answer the questions.

| | Frequency | Percent |
|--|-----------|---------|
| Correctly responded to all four questions | 87 | 82.9 |
| Correctly responded to three of four questions | 17 | 16.2 |
| Correctly responded to two of four questions | 1 | .9 |
| Total | 105 | 100 |

(Subjects were asked the following four questions to test their understanding of insider trading.)

Your stock broker does extensive research on a company and you buy the stock based on his advice.

Insider Trading_____ Not Insider Trading_____

You search the Internet for information about a company and find out information that you believe is not reflected in the stock price and therefore buy the stock.

Insider Trading_____ Not Insider Trading_____

Your uncle is vice president for a company and he tells you that they have been talking privately with another company about a possible merger so you decide to buy the stock.

Insider Trading_____ Not Insider Trading_____

You are a vice president for a company and know that the company is violating environmental regulations. You think this will be discovered in the next week, so you sell your stock in the company before the violations are reported.

Insider Trading_____ Not Insider Trading_____

TABLE 3
Order of Cases

The following table shows the order that the cases were given. One fifth (21) of the 105 subjects received the cases in each order.

| | Given First | Given Second | Given Third | Given Fourth | Given Last |
|----------------|--------------------|---------------------|--------------------|---------------------|-------------------|
| Order 1 | Case 1 | Case 2 | Case 5 | Case 3 | Case 4 |
| Order 2 | Case 2 | Case 1 | Case 5 | Case 4 | Case 3 |
| Order 3 | Case 3 | Case 4 | Case 5 | Case 1 | Case 2 |
| Order 4 | Case 4 | Case 3 | Case 5 | Case 2 | Case 1 |
| Order 5 | Case 5 | Case 4 | Case 3 | Case 2 | Case 1 |

The table below shows how the variables were manipulated between the cases.

| | GAIN | CERTAINTY | BUY/SELL SITUATION |
|--------|-------------|------------------|---------------------------|
| Case 1 | Low | Low | Sell Situation |
| Case 2 | Low | High | Sell Situation |
| Case 3 | High | High | Sell Situation |
| Case 4 | High | Low | Sell Situation |
| Case 5 | High | Low | Buy Situation |

TABLE 4
Test of Effect of Order on Probability of Trading

Anova^a results for effect of order on Case 1

Dependent Variable = probability of trading based on insider information

Categorical Independent Variable = Order of cases^b

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 6960.038 | 4 | 1740.010 | 1.823 | .130 |
| Within Groups | 95453.810 | 100 | 954.538 | | |
| Total | 102413.848 | 104 | | | |

Anova results for effect of order on Case 2

Dependent Variable = probability of trading based on insider information

Categorical Independent Variable = Order of cases

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----------------|-------------|------|------|
| Between Groups | 4211.860 | 4 | 1052.965 | .958 | .434 |
| Within Groups | 108765.18 | 99 ^c | 1098.638 | | |
| Total | 112977.04 | 103 | | | |

Anova results for effect of order on Case 3

Dependent Variable = probability of trading based on insider information

Categorical Independent Variable = Order of cases

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | 3368.133 | 4 | 842.033 | .771 | .546 |
| Within Groups | 109166.67 | 100 | 1091.667 | | |
| Total | 112534.80 | 104 | | | |

Anova results for effect of order on Case 4

Dependent Variable = probability of trading based on insider information

Categorical Independent Variable = Order of cases

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|-------|------|
| Between Groups | 2900.343 | 4 | 725.086 | 1.014 | .404 |
| Within Groups | 71496.190 | 100 | 714.962 | | |
| Total | 74396.533 | 104 | | | |

^a The results presented here are reproduced from output from SPSS software.

^b Order number was 1 through 5 depending on the order that the subjects received the cases.

^c One subject did not respond to the dependent measure question for case 2.

TABLE 4 - Continued
Test of Effect of Order on Probability of Trading

Anova results for effect of order on Case 5

Dependent Variable = probability of trading based on insider information

Categorical Independent Variable = Order of cases

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|------|------|
| Between Groups | 1774.324 | 4 | 443.581 | .394 | .812 |
| Within Groups | 112560.48 | 100 | 1125.605 | | |
| Total | 114334.80 | 104 | | | |

TABLE 5
Certainty Manipulation Check

| | LOW GAIN | HIGH GAIN |
|----------------|---|---|
| LOW CERTAINTY | CASE 1 Mean Likelihood of getting caught = 26.75 | CASE 4 Mean Likelihood of getting caught = 28.41 |
| HIGH CERTAINTY | CASE 2 Mean Likelihood of getting caught = 49.25 | CASE 3 Mean Likelihood of getting caught = 52.30 |

TABLE 6
T-test for Manipulation Check of Certainty

(Output from SPSS with only minor formatting changes)

Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|--------------------|-------|-----|----------------|-----------------|
| Pair 1 | Case 1 - Certainty | 26.75 | 105 | 22.282 | 2.174 |
| | Case 2 - Certainty | 49.25 | 105 | 27.306 | 2.665 |
| Pair 2 | Case 3 - Certainty | 52.30 | 105 | 30.248 | 2.952 |
| | Case 4 - Certainty | 28.41 | 105 | 24.589 | 2.400 |

Paired Samples Test

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|--------|---|--------------------|----------------|-----------------|---|--------|--------|-----|-----------------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Case 1 - Certainty - Case 2 - Certainty | -22.50 | 29.437 | 2.873 | -28.19 | -16.80 | -7.830 | 104 | .000 |
| Pair 2 | Case 3 - Certainty - Case 4 - Certainty | 23.88 | 28.293 | 2.761 | 18.41 | 29.36 | 8.649 | 104 | .000 |

Table 7
T-test for Manipulation Check of Certainty
Cases 1-4 and 2-3 Comparisons

(Output from SPSS with only minor formatting changes)

Paired Samples Statistics

| | | Mean | N | Std. Deviation | Std. Error Mean |
|--------|--------------------|-------|-----|----------------|-----------------|
| Pair 1 | Case 1 - Certainty | 26.75 | 105 | 22.282 | 2.174 |
| | Case 4 - Certainty | 28.41 | 105 | 24.589 | 2.400 |
| Pair 2 | Case 2 - Certainty | 49.25 | 105 | 27.306 | 2.665 |
| | Case 3 - Certainty | 52.30 | 105 | 30.248 | 2.952 |

Paired Samples Test

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|--------|--|--------------------|----------------|-----------------|---|-------|--------|-----|--------------------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Case 1 - Certainty - Case 4 - Certainty | -1.66 | 20.988 | 2.048 | -5.72 | 2.40 | -.811 | 104 | .419 |
| Pair 2 | Case 2 - Certainty - Case 3 - Certainty | -3.05 | 30.549 | 2.981 | -8.96 | 2.86 | -1.022 | 104 | .309 |

TABLE 8
Probability of Trading Cell Means

| | LOW GAIN | HIGH GAIN |
|----------------|---|---|
| LOW CERTAINTY | CASE 1 Mean Probability of Trading = 61.26 | CASE 4 Mean Probability of Trading = 71.28 |
| HIGH CERTAINTY | CASE 2 Mean Probability of Trading = 42.60 | CASE 3 Mean Probability of Trading = 54.22 |

TABLE 9
Effect of Gain and Certainty on Probability of Trading

(Output from SPSS with only minor formatting changes)

Multivariate

| Effect | | Value | F | Hypothesis | Error df | Sig. |
|---------------------|---------------|-------|-------|------------|----------|------|
| Gain | Pillai's | .188 | 23.92 | 1.000 | 103.00 | .000 |
| | Wilks' | .812 | 23.92 | 1.000 | 103.00 | .000 |
| | Hotelling's | .232 | 23.92 | 1.000 | 103.00 | .000 |
| | Roy's Largest | .232 | 23.92 | 1.000 | 103.00 | .000 |
| Certainty | Pillai's | .359 | 57.78 | 1.000 | 103.00 | .000 |
| | Wilks' | .641 | 57.78 | 1.000 | 103.00 | .000 |
| | Hotelling's | .561 | 57.78 | 1.000 | 103.00 | .000 |
| | Roy's Largest | .561 | 57.78 | 1.000 | 103.00 | .000 |
| Gain * Certainty | Pillai's | .002 | .191 | 1.000 | 103.00 | .663 |
| | Wilks' | .998 | .191 | 1.000 | 103.00 | .663 |
| | Hotelling's | .002 | .191 | 1.000 | 103.00 | .663 |
| | Roy's Largest | .002 | .191 | 1.000 | 103.00 | .663 |

TABLE 10
Mixed Model Results
Cases 1-4 Combined

Mixed Model Results with Gain and Certainty manipulated and Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws measured.

Model: Trading = $b_0 + b_1 * \text{Gain} + b_2 * \text{Certainty} + b_3 * \text{Severity} + b_4 * \text{Cynicism} + b_5 * \text{Guilt} + b_6 * \text{Stigma} + b_7 * \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 36.1835 | 4.02 | <.001 |
| Gain | + | 7.0163 | 3.86 | <.001 |
| Certainty | - | -7.0880 | -3.73 | <.001 |
| Severity | - | -.6758 | -1.11 | .1337 |
| Cynicism | + | 4.0945 | 6.70 | <.001 |
| Guilt | - | -2.8558 | -4.80 | <.001 |
| Stigma | + | 1.1783 | 1.91 | .029 |
| Agreement | + | 1.0480 | 1.88 | .030 |

Number of Observations = 419^a

Definition of Variables

Trading = Subjects' probability of trading based on the insider information in the case.

Probability was measured on a scale of 0 - 100%.

Gain = Expected gain from insider trading. Manipulated variable – High gain case = 1, Low gain case = 0.

Certainty = Likelihood of getting caught. Manipulated variable – High certainty case = 1, Low certainty case = 0.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

^a One respondent did not respond to probability of trading for one of the cases and therefore that observation was omitted from the analysis.

TABLE 11
Regression Results
Case 1 - Low Gain, Low Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Trading = $b_0 + b_1 \text{Severity} + b_2 \text{Cynicism} + b_3 \text{Guilt} + b_4 \text{Stigma} + b_5 \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 56.709 | 2.985 | .004 |
| Severity | - | .819 | .581 | .563 |
| Cynicism | + | 3.993 | 2.732 | .004 |
| Guilt | - | -5.855 | -3.635 | <.001 |
| Stigma | + | 1.365 | .943 | .174 |
| Agreement | + | -1.680 | -1.521 | .131 |

$R^2 = .310$

Number of Observations = 105

Model F = 8.875, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Trading = Subjects' probability of trading based on the insider information in the case.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 12
Regression Results
Case 2 - Low Gain, High Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Trading = $b_0 + b_1*Severity + b_2*Cynicism + b_3*Guilt + b_4*Stigma + b_5*Agreement$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 45.078 | 2.815 | .006 |
| Severity | - | -1.350 | -.968 | .168 |
| Cynicism | + | 3.683 | 3.030 | .002 |
| Guilt | - | -3.897 | -2.680 | .005 |
| Stigma | + | 1.323 | 1.047 | .149 |
| Agreement | + | .466 | .323 | .374 |

$R^2 = .380$

Number of Observations = 104

Model F = 12.032, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Trading = Subjects' probability of trading based on the insider information in the case.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 13
Regression Results
Case 3 - High Gain, High Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Trading = $b_0 + b_1*Severity + b_2*Cynicism + b_3*Guilt + b_4*Stigma + b_5*Agreement$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 28.907 | 1.497 | .138 |
| Severity | - | -.201 | -.162 | .436 |
| Cynicism | + | 4.719 | 3.406 | .001 |
| Guilt | - | -3.028 | -2.499 | .007 |
| Stigma | + | 1.630 | 1.339 | .092 |
| Agreement | + | .383 | .352 | .363 |

$R^2 = .385$

Number of Observations = 105

Model F = 12.415, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Trading = Subjects' probability of trading based on the insider information in the case.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 14
Regression Results
Case 4 - High Gain, Low Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Trading = $b_0 + b_1 \text{Severity} + b_2 \text{Cynicism} + b_3 \text{Guilt} + b_4 \text{Stigma} + b_5 \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 50.717 | 3.213 | .002 |
| Severity | - | -.869 | -.828 | .205 |
| Cynicism | + | 4.500 | 3.627 | <.001 |
| Guilt | - | -3.142 | -3.165 | .001 |
| Stigma | + | 1.131 | .995 | .161 |
| Agreement | + | -.391 | -.387 | .700 |

$R^2 = .355$

Number of Observations = 105

Model F = 10.914, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Trading = Subjects' probability of trading based on the insider information in the case.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 15
Regression Results
Case 5 - High Gain, Low Certainty – (Buy Situation)

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Trading = $b_0 + b_1 \cdot \text{Severity} + b_2 \cdot \text{Cynicism} + b_3 \cdot \text{Guilt} + b_4 \cdot \text{Stigma} + b_5 \cdot \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 36.733 | 2.561 | .012 |
| Severity | - | -.442 | -381 | .352 |
| Cynicism | + | 5.186 | 4.349 | <.001 |
| Guilt | - | -4.959 | -3.976 | <.001 |
| Stigma | + | 1.045 | 1.050 | .148 |
| Agreement | + | .551 | .588 | .279 |

$R^2 = .567$

Number of Observations = 105

Model F = 25.943, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Trading = Subjects' probability of trading based on the insider information in the case.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 16
Comparison of Severity between Cases

(Output from SPSS with only minor formatting changes)

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|-----|---------|---------|------|----------------|
| Case 1 - Severity | 105 | 1 | 10 | 4.86 | 2.367 |
| Case 2 - Severity | 105 | 1 | 11 | 6.34 | 2.605 |
| Case 3 - Severity | 105 | 1 | 11 | 6.44 | 2.649 |
| Case 4 - Severity | 105 | 1 | 11 | 5.42 | 2.352 |
| Case 5 - Severity | 105 | 1 | 11 | 5.40 | 2.563 |
| Valid N (listwise) | 105 | | | | |

TABLE 17
Test of Prospect Theory

T-test of difference between probability of trading for loss situation and probability of trading for gain situation

| Probability of Trading for Loss Situation (Case 4) | Probability of Trading for Gain Situation (Case 5) | Difference in Case 4 and Case 5 Probability of Trading | T-value | Significance |
|--|--|--|---------|--------------|
| 71.27 | 53.80 | 17.47 | 6.585 | < .001 |

TABLE 18
Test of Social Desirability Response Bias

Case 1 - Low Gain Low Certainty

| Probability of Trading Based on Information | Probability of Best Friend Trading Based on Information | Difference between Probability of Trading and Probability of Best Friend Trading | T-value | Significance |
|---|---|--|---------|--------------|
| 61.36 | 64.08 | 2.72 | 1.336 | .093 |

Case 2 - Low Gain High Certainty

| Probability of Trading Based on Information | Probability of Best Friend Trading Based on Information | Difference between Probability of Trading and Probability of Best Friend Trading | T-value | Significance |
|---|---|--|---------|--------------|
| 42.60 | 46.68 | 4.09 | 2.115 | .019 |

Case 3 - High Gain High Certainty

| Probability of Trading Based on Information | Probability of Best Friend Trading Based on Information | Difference between Probability of Trading and Probability of Best Friend Trading | T-value | Significance |
|---|---|--|---------|--------------|
| 53.80 | 58.38 | 4.58 | 2.280 | .013 |

Case 4 - High Gain Low Certainty

| Probability of Trading Based on Information | Probability of Best Friend Trading Based on Information | Difference between Probability of Trading and Probability of Best Friend Trading | T-value | Significance |
|---|---|--|---------|--------------|
| 71.27 | 72.04 | .77 | .463 | .332 |

Case 5 - High Gain Low Certainty - (Abnormal Gain - Buy Situation)

| Probability of Trading Based on Information | Probability of Best Friend Trading Based on Information | Difference between Probability of Trading and Probability of Best Friend Trading | T-value | Significance |
|---|---|--|---------|--------------|
| 53.80 | 60.35 | 6.55 | 3.067 | .002 |

TABLE 19
Gender Effects For Guilt and Social Stigma

| Panel A: Guilt | Mean Response ^a | | | | |
|----------------|----------------------------|------|------------|--------|--------------|
| | Female | Male | Difference | T-stat | Significance |
| Case 1 | 5.61 | 4.81 | .8 | 1.605 | .056 |
| Case 2 | 6.89 | 6.60 | .29 | .520 | .302 |
| Case 3 | 7.05 | 5.81 | 1.24 | 2.122 | .018 |
| Case 4 | 6.16 | 5.06 | 1.1 | 2.008 | .024 |
| Case 5 | 6.05 | 5.44 | .61 | 1.039 | .151 |

| Panel B: Stigma | Mean Response ^b | | | | |
|-----------------|----------------------------|--------|------------|--------|--------------|
| | Male | Female | Difference | T-stat | Significance |
| Case 1 | 7.27 | 6.58 | .69 | 1.446 | .076 |
| Case 2 | 5.76 | 5.55 | .21 | .413 | .340 |
| Case 3 | 6.75 | 5.89 | .86 | 1.588 | .058 |
| Case 4 | 7.54 | 6.61 | .93 | 2.071 | .021 |
| Case 5 | 6.91 | 6.47 | .44 | .817 | .208 |

^a This is the mean response to the question: “If you traded based on this information, to what degree would you feel guilty?” Allowable responses ranged from 1= Not guilty to 11=Extremely guilty.

^b This is the mean response to the question: “How likely is it that your friends would lose respect for you if they found out you traded based on this information?” Allowable responses ranged from 1=Extremely likely to 11=Extremely unlikely.

TABLE 20
Gender Effects on Certainty

Certainty (likelihood of getting caught) was manipulated within the cases. It's value was also measure at the end of each case on a 0-100% scale. The mean response between cases is not expected to be the same since the variable was manipulated.

| Certainty | Mean Response ^a | | | | |
|-----------|----------------------------|-------|------------|--------|--------------|
| | Female | Male | Difference | T-stat | Significance |
| Case 1 | 37.03 | 20.93 | 16.1 | 3.779 | .000 |
| Case 2 | 55.50 | 45.70 | 9.8 | 1.785 | .039 |
| Case 3 | 64.47 | 45.39 | 19.08 | 3.246 | .001 |
| Case 4 | 36.45 | 23.86 | 12.59 | 2.589 | .006 |
| Case 5 | 33.34 | 20.75 | 12.59 | 2.823 | .003 |

^a This is the response to the manipulation check question to measure certainty. This was used because certainty was a manipulated variable within the cases rather than being a measured variable. This is the mean response to the question: "If you chose to trade based on the information in the case, what is the likelihood that you would get caught?" Allowable responses were from 0 – 100%.

TABLE 21
Mixed Model Results with Average of Trading and Friend Trading as Dependent Variable
Cases 1-4 Combined

Mixed Model Results with Gain and Certainty manipulated and Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws measured.

Model: Avg. Trading = $b_0 + b_1 * \text{Gain} + b_2 * \text{Certainty} + b_3 * \text{Severity} + b_4 * \text{Cynicism} + b_5 * \text{Guilt} + b_6 * \text{Stigma} + b_7 * \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 25.2587 | 3.29 | .001 |
| Gain | + | 6.2887 | 4.11 | <.001 |
| Certainty | - | -6.0610 | -3.78 | <.001 |
| Severity | - | -.3322 | -0.64 | .261 |
| Cynicism | + | 4.4517 | 8.58 | <.001 |
| Guilt | - | -2.0863 | -4.13 | <.001 |
| Stigma | + | 1.6789 | 3.20 | .001 |
| Agreement | + | 1.0782 | 2.28 | .012 |

Number of Observations = 419^a

Definition of Variables

Avg . Trading = Average of subjects' probability of trading based on the insider information in the case and probability that subjects' best friend would trade based on the insider information in the case. Probability was measured on a scale of 0 - 100% for both questions.

Gain = Expected gain from insider trading. Manipulated variable – High gain case = 1, Low gain case = 0.

Certainty = Likelihood of getting caught. Manipulated variable – High certainty case = 1, Low certainty case = 0.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

^a One respondent did not respond to probability of trading for one of the cases and therefore that observation was omitted from the analysis.

TABLE 22
Regression Results with Average of Trading and Friend Trading as Dependent Variable
Case 1 - Low Gain, Low Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Avg. Trading = $b_0 + b_1 \cdot \text{Severity} + b_2 \cdot \text{Cynicism} + b_3 \cdot \text{Guilt} + b_4 \cdot \text{Stigma} + b_5 \cdot \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 43.590 | 2.678 | .009 |
| Severity | - | .244 | .202 | .840 |
| Cynicism | + | 4.038 | 3.225 | .001 |
| Guilt | - | -4.091 | -2.963 | .002 |
| Stigma | + | 1.985 | 1.595 | .057 |
| Agreement | + | -.956 | -1.006 | .317 |

$R^2 = .343$

Number of Observations = 104^a

Model F = 10.251, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Avg . Trading = Average of subjects' probability of trading based on the insider information in the case and probability that subjects' best friend would trade based on the insider information in the case. Probability was measured on a scale of 0 - 100% for both questions.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

^a One of the respondents did not respond to one of the dependent measure questions for case 1.

TABLE 23
Regression Results with Average of Trading and Friend Trading as Dependent Variable
Case 2 - Low Gain, High Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Avg. Trading = $b_0 + b_1 \cdot \text{Severity} + b_2 \cdot \text{Cynicism} + b_3 \cdot \text{Guilt} + b_4 \cdot \text{Stigma} + b_5 \cdot \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 30.406 | 2.206 | .030 |
| Severity | - | -.653 | -.544 | .294 |
| Cynicism | + | 4.332 | 4.143 | <.001 |
| Guilt | - | -3.296 | -2.635 | .005 |
| Stigma | + | 2.021 | 1.858 | .033 |
| Agreement | + | .544 | .438 | .331 |

$R^2 = .447$

Number of Observations = 104^a

Model F = 15.855, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Avg . Trading = Average of subjects' probability of trading based on the insider information in the case and probability that subjects' best friend would trade based on the insider information in the case. Probability was measured on a scale of 0 - 100% for both questions.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

^a One of the respondents did not respond to one of the questions for case 2.

TABLE 24
Regression Results with Average of Trading and Friend Trading as Dependent Variable
Case 3 - High Gain, High Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Avg. Trading = $b_0 + b_1 \cdot \text{Severity} + b_2 \cdot \text{Cynicism} + b_3 \cdot \text{Guilt} + b_4 \cdot \text{Stigma} + b_5 \cdot \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 13.423 | .831 | .408 |
| Severity | - | .01379 | .013 | .989 |
| Cynicism | + | 5.749 | 4.961 | <.001 |
| Guilt | - | -2.191 | -2.163 | .017 |
| Stigma | + | 2.230 | 2.190 | .016 |
| Agreement | + | .406 | .446 | .329 |

$R^2 = .493$

Number of Observations = 105

Model F = 19.271, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Avg . Trading = Average of subjects' probability of trading based on the insider information in the case and probability that subjects' best friend would trade based on the insider information in the case. Probability was measured on a scale of 0 - 100% for both questions.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 25
Regression Results with Average of Trading and Friend Trading as Dependent Variable
Case 4 - High Gain, Low Certainty

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Avg. Trading = $b_0 + b_1 * \text{Severity} + b_2 * \text{Cynicism} + b_3 * \text{Guilt} + b_4 * \text{Stigma} + b_5 * \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 44.534 | 3.078 | .003 |
| Severity | - | -.515 | -.535 | .297 |
| Cynicism | + | 4.104 | 3.609 | <.001 |
| Guilt | - | -2.903 | -3.191 | .001 |
| Stigma | + | 1.729 | 1.660 | .050 |
| Agreement | + | .07392 | .080 | .469 |

$R^2 = .389$

Number of Observations = 105

Model F = 12.626, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Avg . Trading = Average of subjects' probability of trading based on the insider information in the case and probability that subjects' best friend would trade based on the insider information in the case. Probability was measured on a scale of 0 - 100% for both questions.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

TABLE 26
Regression Results with Average of Trading and Friend Trading as Dependent Variable
Case 5 - High Gain, Low Certainty – (Buy Situation)

Regression Results with Severity, Cynicism, Guilt, Social Stigma, and Agreement with Laws

Model: Avg. Trading = $b_0 + b_1 * \text{Severity} + b_2 * \text{Cynicism} + b_3 * \text{Guilt} + b_4 * \text{Stigma} + b_5 * \text{Agreement}$

| Variable | Expected Sign | Coefficient | t-stat | p-value |
|-----------|---------------|-------------|--------|---------|
| Intercept | | 39.351 | 3.135 | .002 |
| Severity | - | -.103 | -.101 | .460 |
| Cynicism | + | 4.415 | 4.230 | <.001 |
| Guilt | - | -4.562 | -4.179 | <.001 |
| Stigma | + | 1.343 | 1.542 | .063 |
| Agreement | + | .599 | .730 | .234 |

$R^2 = .586$

Number of Observations = 105

Model F = 27.986, 5 degrees of freedom, $p < 0.001$

Definition of Variables

Avg . Trading = Average of subjects' probability of trading based on the insider information in the case and probability that subjects' best friend would trade based on the insider information in the case. Probability was measured on a scale of 0 - 100% for both questions.

Probability was measured on a scale of 0 - 100%.

Severity = Subjects' perception of severity of penalty if caught trading based on the information in the case. Severity was measured on an 11 point likert scale.

Cynicism = Subjects' perception of the portion of people who would trade based on the insider information in the case. Cynicism was measured on an 11 point likert scale.

Guilt = Subjects' perception of the degree of guilt they would feel from trading based on the insider information in the case. Guilt was measured on an 11 point likert scale.

Stigma = Subjects' perception of the likelihood that they would lose their friends respect if their friends found out they traded based on the information in the case. Stigma was measured on an 11 point likert scale.

Agreement = Subjects' agreement with the laws making trading based on the information in the case illegal. Agreement was measured on an 11 point likert scale.

APPENDIX A

This was the instrument given out to the subjects. It includes the three-item Defining Issues Test that was given out at the end of the instrument that was not included at part of this study.

“Insider trading” can be used to refer to the legal form of insider trading, where officers or other insiders in a company trade stocks of their company without the use of privileged insider information. However, “insider trading” is usually used to refer to illegal insider trading, where individuals with privileged information use that information to gain an advantage in trading stocks. The following 5 cases will all present examples of illegal insider trading.

There are no right or wrong answers.

Please answer honestly.

Your responses will be completely anonymous.

Case 1

You have invested the equivalent of two months of your gross salary in stock of a medical research company that a friend works for. The company is reliant on a new cancer drug that it has been working on for several years. The drug has shown success in early stages of research. Your friend is someone that you grew up with and you trust completely. Your friend comes to visit you and after dinner you are catching up on old times and your careers. Your friend is in the upper management of the company. Your friend mentions that the accounting department is being asked to consider the effects of various layoffs because the company has just had a major set back in its cancer research testing on animals. The information has not been made public, but is going to be released at the end of the month when the results are published. You have complete trust in the authenticity of your friend's story. Based on your knowledge of the stock market, you believe the stock price (and your investment) will drop by 50% when this information is released.

What is the probability that you would consider trading based on the information in the case?
 _____ %

If you got caught trading based on the insider information in this case, how severe of a penalty do you think you would receive?

| | | | | | | | | | | |
|----------------|---|------------|---|------------|---|------------------------|---|---|----------------------------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Just a Warning | | Small Fine | | Large Fine | | Large Fine & Probation | | | Large Fine & Incarceration | |

What portion of people in the US would trade if they were in this situation?

| | | | | | | | | | | |
|----------------|---|------------|---|------------|---|---|------------------|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Very Few Would | | Some Would | | Most Would | | | Nearly All Would | | | |

If you traded based on this information to what degree would you feel guilty?

| | | | | | | | | | | |
|------------|---|-----------------|---|-----------------|---|---|------------------|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Not Guilty | | Slightly Guilty | | Somewhat Guilty | | | Extremely Guilty | | | |

How likely is it that your friends would lose respect for you if they found out you traded based on this information?

| | | | | | | | | | | |
|------------------|---|--------------|---|----------------|---|---|--------------------|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Extremely Likely | | Quite Likely | | Quite Unlikely | | | Extremely Unlikely | | | |

To what extent do you agree that trading based on the information in the case should be illegal?

| | | | | | | | | | | |
|----------------|---|----------------|---|-------------------|---|---|-------------------|---|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Strongly Agree | | Slightly Agree | | Slightly Disagree | | | Strongly Disagree | | | |

What is the probability that your best friend would consider trading if he/she were in the situation described in the case?
 _____ %

If you chose to trade based on the information in the case, what is the likelihood that you would get caught?
 _____ %

Case 2

You have a fairly diversified portfolio though you recently invested the equivalent of four months salary in the stock of one company. You work in a law office and have just started working on a new case that involves the company that you have invested in. Upon reading the case you realize that the case involves a major environmental lawsuit against the company that you own stock in. The company's stock price has been stable though you know that this lawsuit will hurt its stock price when the public finds out about it. No public information about the lawsuit has been released yet. Based on your knowledge of the stock market, you believe the stock price will decrease by 25% when this information is released. What is the probability that you would consider trading based on the information in the case?
 _____ %

If you got caught trading based on the insider information in this case, how severe of a penalty do you think you would receive?

| | | | | | | | | | | |
|---------|---|-------|---|-------|---|-------------|---|---|-----------------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Just a | | Small | | Large | | Large Fine | | | Large Fine | |
| Warning | | Fine | | Fine | | & Probation | | | & Incarceration | |

What portion of people in the US would trade if they were in this situation?

| | | | | | | | | | | |
|----------|---|---|-------|---|---|-------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Very Few | | | Some | | | Most | | | Nearly | |
| Would | | | Would | | | Would | | | All Would | |

If you traded based on this information to what degree would you feel guilty?

| | | | | | | | | | | |
|--------|---|---|----------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Not | | | Slightly | | | Somewhat | | | Extremely | |
| Guilty | | | Guilty | | | Guilty | | | Guilty | |

How likely is it that your friends would lose respect for you if they found out you traded based on this information?

| | | | | | | | | | | |
|-----------|---|---|--------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Extremely | | | Quite | | | Quite | | | Extremely | |
| Likely | | | Likely | | | Unlikely | | | Unlikely | |

To what extent do you agree that trading based on the information in the case should be illegal?

| | | | | | | | | | | |
|----------|---|---|----------|---|---|----------|---|---|----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Strongly | | | Slightly | | | Slightly | | | Strongly | |
| Agree | | | Agree | | | Disagree | | | Disagree | |

What is the probability that your best friend would consider trading if he/she were in the situation described in the case?
 _____ %

If you chose to trade based on the information in the case, what is the likelihood that you would get caught?
 _____ %

Case 3

You have been working for the same publicly traded company since getting out of college and have been putting most of your money into stock. You have 80% of your savings invested in stock of the company that you work for. The company's earnings have grown consistently over the last ten years. You have been working closely with the accountants and auditors during the past several months and have noticed a great deal of tension in the relationship with the external auditors. The auditors have found accounting irregularities and are requiring a restatement of past financial statements. The company's past profits will shrink considerably after the restatements. Analysts are expecting the usual profit growth from the company. News of the restatements will be released in the next few weeks. Based on your knowledge of the situation and the stock market, you believe the stock price (and your investment in the stock) will drop by 40% when this information is released to the public.

What is the probability that you would consider trading based on the information in the case?

_____ %

If you got caught trading based on the insider information in this case, how severe of a penalty do you think you would receive?

| | | | | | | | | | | |
|---------|---|-------|---|-------|---|-------------|---|---|-----------------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Just a | | Small | | Large | | Large Fine | | | Large Fine | |
| Warning | | Fine | | Fine | | & Probation | | | & Incarceration | |

What portion of people in the US would trade if they were in this situation?

| | | | | | | | | | | |
|----------|---|---|-------|---|---|-------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Very Few | | | Some | | | Most | | | Nearly | |
| Would | | | Would | | | Would | | | All Would | |

If you traded based on this information to what degree would you feel guilty?

| | | | | | | | | | | |
|--------|---|---|----------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Not | | | Slightly | | | Somewhat | | | Extremely | |
| Guilty | | | Guilty | | | Guilty | | | Guilty | |

How likely is it that your friends would lose respect for you if they found out you traded based on this information?

| | | | | | | | | | | |
|-----------|---|---|--------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Extremely | | | Quite | | | Quite | | | Extremely | |
| Likely | | | Likely | | | Unlikely | | | Unlikely | |

To what extent do you agree that trading based on the information in the case should be illegal?

| | | | | | | | | | | |
|----------|---|---|----------|---|---|----------|---|---|----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Strongly | | | Slightly | | | Slightly | | | Strongly | |
| Agree | | | Agree | | | Disagree | | | Disagree | |

What is the probability that your best friend would consider trading if he/she were in the situation described in the case?

_____ %

If you chose to trade based on the information in the case, what is the likelihood that you would get caught?

_____ %

Case 4

Most of your personal wealth is invested in the stock market. You have invested 64% of your total wealth in the stock of a new company that a very close friend works for. Your friend's uncle is a member of top management of the company. Your friend has just attended a family gathering and spoken with his uncle. To your shock, the friend informs you that his/her uncle has been considering taking an offer with another company because the company that he works for (and you have invested in) is about to have a devastating lawsuit brought against it. The information has not been made public yet. Your friend recommends that you sell your stock in the company because he/she estimates that the stock price will drop in half in the next few weeks after the lawsuit gets filed. You have complete trust in your friend and the authenticity of the information. Based on your knowledge of the stock market, you believe that your investment in the stock will in fact lose half of its value when the information is made public.

What is the probability that you would consider trading based on the information in the case?
 _____ %

If you got caught trading based on the insider information in this case, how severe of a penalty do you think you would receive?

| | | | | | | | | | | |
|---------|---|-------|---|-------|---|-------------|---|---|-----------------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Just a | | Small | | Large | | Large Fine | | | Large Fine | |
| Warning | | Fine | | Fine | | & Probation | | | & Incarceration | |

What portion of people in the US would trade if they were in this situation?

| | | | | | | | | | | |
|----------|---|---|-------|---|---|-------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Very Few | | | Some | | | Most | | | Nearly | |
| Would | | | Would | | | Would | | | All Would | |

If you traded based on this information to what degree would you feel guilty?

| | | | | | | | | | | |
|--------|---|---|----------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Not | | | Slightly | | | Somewhat | | | Extremely | |
| Guilty | | | Guilty | | | Guilty | | | Guilty | |

How likely is it that your friends would lose respect for you if they found out you traded based on this information?

| | | | | | | | | | | |
|-----------|---|---|--------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Extremely | | | Quite | | | Quite | | | Extremely | |
| Likely | | | Likely | | | Unlikely | | | Unlikely | |

To what extent do you agree that trading based on the information in the case should be illegal?

| | | | | | | | | | | |
|----------|---|---|----------|---|---|----------|---|---|----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Strongly | | | Slightly | | | Slightly | | | Strongly | |
| Agree | | | Agree | | | Disagree | | | Disagree | |

What is the probability that your best friend would consider trading if he/she were in the situation described in the case?

_____ %

If you chose to trade based on the information in the case, what is the likelihood that you would get caught?

_____ %

Case 5

You have recently liquidated several stocks from your portfolio giving you substantial available cash. Your oldest and closest friend, who currently works for an investment banking firm stops by to stay with you for a few days while he/she is in town. After catching up on your respective careers, your friend informs you that he/she has been working on a merger/acquisition. A small publicly traded research company is being acquired by a much larger company. You and your friend both agree that based on the situation the small firm's stock price will double in a few weeks when the acquisition is made public. He informs you that he can not trade based on the information because his investment activity is closely monitored due to his position. However, he suggests that you take advantage of the situation since no one knows you have access to the information. You have 32% of your total wealth available that you could invest in the stock that is expected to double. You have complete trust in your friend and the authenticity of the information.

What is the probability that you would consider trading based on the information in the case?
 _____ %

If you got caught trading based on the insider information in this case, how severe of a penalty do you think you would receive?

| | | | | | | | | | | |
|---------|---|-------|---|-------|---|-------------|---|---|-----------------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Just a | | Small | | Large | | Large Fine | | | Large Fine | |
| Warning | | Fine | | Fine | | & Probation | | | & Incarceration | |

What portion of people in the US would trade if they were in this situation?

| | | | | | | | | | | |
|----------|---|---|-------|---|---|-------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Very Few | | | Some | | | Most | | | Nearly | |
| Would | | | Would | | | Would | | | All Would | |

If you traded based on this information to what degree would you feel guilty?

| | | | | | | | | | | |
|--------|---|---|----------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Not | | | Slightly | | | Somewhat | | | Extremely | |
| Guilty | | | Guilty | | | Guilty | | | Guilty | |

How likely is it that your friends would lose respect for you if they found out you traded based on this information?

| | | | | | | | | | | |
|-----------|---|---|--------|---|---|----------|---|---|-----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Extremely | | | Quite | | | Quite | | | Extremely | |
| Likely | | | Likely | | | Unlikely | | | Unlikely | |

To what extent do you agree that trading based on the information in the case should be illegal?

| | | | | | | | | | | |
|----------|---|---|----------|---|---|----------|---|---|----------|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Strongly | | | Slightly | | | Slightly | | | Strongly | |
| Agree | | | Agree | | | Disagree | | | Disagree | |

What is the probability that your best friend would consider trading if he/she were in the situation described in the case?

_____ %

If you chose to trade based on the information in the case, what is the likelihood that you would get caught?

_____ %

1. Gender Male___ Female___

2. Age _____

3. Have you ever traded stock before Yes___ No___

If you answered no to the previous question you may skip the next 2 questions

4. How long have you been trading stocks?

0-1 year___ 1-2years___ 3-5 years___ 5-10 years___ Over 10 years___

5. How many times do you trade stocks per year

1-2 Trades/year___ 2-5 Trades/year___ 5-10 Trades/year___ Over 10 trades/year___

6. Approximate annual family income?

Under \$20,000___ \$20,000 – \$40,000___ \$40,000-\$80,000___ Over \$80,000___

7. How many years of full time work experience do you have?

Less than 1year___ 1-2 years___ 2-5 years___ 5-10 years___ over 10 years___

8. Are you currently a full time student? Yes___ No___

9. Are you currently working? Full Time___ Part Time___ Not currently working___

10. In what area did you receive your undergraduate degree? Accounting Finance
Management Marketing Information Systems Other Business Non-Business

11. What degree program are you in? (Circle One)

MBA MS in ACIS MS in Accounting Other _____

12. How many times have you read about or discussed insider trading in classes?

0___ 1-2___ 3-5___ 5-10___ over 10___

13. How many times have you heard about or read about insider trading in the news media?

0___ 1-2___ 3-5___ 5-10___ over 10___

14. How long have you lived in the United States?

0-1 year___ 1-2 years___ 2-5 years___ 5-10 years___ Over 10 years___

Which (if any) of the following would be illegal insider trading

Your stock broker does extensive research on a company and you buy the stock based on his advice.

Insider Trading _____ Not Insider Trading _____

You search the Internet for information about a company and find out information that you believe is not reflected in the stock price and therefore buy the stock.

Insider Trading _____ Not Insider Trading _____

Your uncle is vice president for a company and he tells you that they have been talking privately with another company about a possible merger so you decide to buy the stock.

Insider Trading _____ Not Insider Trading _____

You are a vice president for a company and know that the company is violating environmental regulations. You think this will be discovered in the next week, so you sell your stock in the company before the violations are reported.

Insider Trading _____ Not Insider Trading _____

APPENDIX B

The following is the request and protocol for the for the study that was given to the Virginia Tech IRB department. The IRB is the group responsible for the protection of human subjects used in research at Virginia Tech. Due to the nature of this study it was approved as exempted research because it proposed no more than a minimal risk to the subjects. As exempted research, the subjects were not required to fill out an informed consent form to participate in the study.

Request for Exemption of Research Involving Human Subjects
[please print or type responses below]

Principal Investigator(Faculty): Larry Killough PID Larry

Co-Investigators(Faculty or Student) Joseph Beams PID Jobeams

Department: Acct & Informations Systems (ACIS) Mail Code: 0101 E-mail: lacct@vt.edu Phone 231-9639

Project Title: Insider Trading Motivations and Deterrents # of Human Subjects 100

Source of Funding Support: Sponsored Research (OSP No.: _____) _____ Departmental Research

All investigators of this project are qualified through completion of the formal training program or web-based training programs provided by the Virginia Tech Research Compliance Office.

Note: To qualify for Exemption, the research must be (a) of minimal risk to the subjects, (b) must not involve any of the special classes of subjects, and (c) must be in one or more of the following categories. A full description of these categories may be found in the Exempt Research section of the Virginia Tech "IRB Protocol Submission Instructions Document or in the federal regulations [45 CFR 46.101(b)(1-6)]. (<http://ohrp.osophs.dhhs.gov/humansubjects/guidance/45cfr46.htm#46.101>)

Please mark/check the appropriate category or categories below which qualify the proposed project for exemption:

- 1. Research will be conducted in established or commonly accepted educational settings, involving normal educational practices [see item (1), page 6 of the "Instructions" document].
- 2. Research will involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, **unless** the subjects can be identified directly or through identifiers linked to the subjects **and** disclosure of responses could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability or reputation [see item (2), page 6 –"Instructions"].
- 3. Research will involve the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under item 2) above **if** the subjects are elected or appointed public officials or candidates for public office; **or** Federal statute(s) require(s) that the confidentiality or other personally identifiable information will be maintained [see item (3), page 6 of the "Instructions" document].
- 4. Research will involve the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified directly or through identifiers linked to the subjects [see item (4), page 7 of the "Instructions" document].
- 5. Research and demonstration projects designed to study, evaluate, or otherwise examine public benefit or service programs, procedures for obtaining benefits or proposed changes in such programs [see item (5), page 7 of the "Instructions" document].
- 6. Taste and food quality evaluation and consumer acceptance studies [see item (6), page 7- "Instructions].

| | | | |
|-----------------------|------------------------|---------------------|----------------|
| | <u>Larry Killough</u> | <u>Joseph Beams</u> | <u>8-30-02</u> |
| Investigator(s) | Print name | | Date |
| | <u>Wayne Leininger</u> | | <u>8-30-02</u> |
| Departmental Reviewer | Print name | | Date |

Chair, Institutional Review Board

Outline for Protocol to Accompany IRB Request

Justification of Project

The purpose of this project is to access the determinants of insider trading. Various scenarios have been designed to address the motivations for and deterrents to insider trading.

Procedures

The subject pool will be graduate business students at VA Tech in the Fall 2002. I expected approximately 100 subjects from several MBA and Master of Accounting classes. The classes included in the study will be ACIS 5214-Advanced Strategic Cost Management, ACIS 5194-Financial Statement Analysis, and ACIS 5004-Accounting for Multinational Enterprises. Students will be asked to participate in the study. All students in the classes that participate will have the opportunity to participate. The instrument will take approximately one hour to complete. The students will receive a small amount of extra credit for taking part in the study. The students will also be compensated \$10 each for taking part in the study.

The instrument will not be given out during class time. The students will sign up to take the instrument at a time that is convenient for them. The students will come to a lab in small groups to take the survey.

Risks and Benefits

I am not aware of any risks associated with the survey. The potential benefit to the students is a better understanding and awareness of insider trading. The cases are intended to make the possibility of receiving insider information a realistic situation to the students. This will hopefully cause the students to think about insider trading as a very real problem rather than something that is very removed.

Confidentiality/Anonymity

The subjects will be guaranteed anonymity. The students' names will be checked off when they come in to take the survey so that they can receive extra credit and be compensated, however their names will not be associated with their responses in any way.

Informed Consent

This project is applying for "Exemption of Research Involving Human Subjects" as defined in the IRB Protocol Submission Instruction Document. As described on page 6 of that document, "Normally, a signed Informed Consent document is not required for exempt research".

The students will be advised that they are not required to fill out the survey but that it is to further academic research and they will be given extra credit and compensated for their time.

APPENDIX C
Sign Up Sheets to Take Part in Study

| Please Print Name Clearly | | | | | | |
|---------------------------------------|-------------------|------------------|----------------------|--------------------|------------------|--------------------|
| Limit 6 Students Per Time Slot | | | | | | |
| Monday September 9, 2002 | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Example | <i>John Smith</i> | <i>Jim Smith</i> | <i>Sally Johnson</i> | <i>Kim Johnson</i> | <i>Joe Brown</i> | <i>Chris Brown</i> |
| 8:00-9:00 AM | | | | | | |
| 9:00-10:00 AM | | | | | | |
| 10:00-11:00 AM | | | | | | |
| 11:00-12:00 AM | | | | | | |
| 12:00-1:00 PM | | | | | | |
| 1:00-2:00 PM | | | | | | |
| 2:00-3:00 PM | | | | | | |
| 3:00-4:00 PM | | | | | | |
| 4:00-5:00 PM | | | | | | |
| 5:00-6:00 PM | | | | | | |
| 6:00-7:00 PM | | | | | | |
| 7:00-8:00 PM | | | | | | |

| | | | | | | |
|---------------------------------------|-------------------|------------------|----------------------|--------------------|------------------|--------------------|
| Please Print Name Clearly | | | | | | |
| Limit 6 Students Per Time Slot | | | | | | |
| Tuesday September 10, 2002 | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Example | <i>John Smith</i> | <i>Jim Smith</i> | <i>Sally Johnson</i> | <i>Kim Johnson</i> | <i>Joe Brown</i> | <i>Chris Brown</i> |
| 8:00-9:00 AM | | | | | | |
| 9:00-10:00 AM | | | | | | |
| 10:00-11:00 AM | | | | | | |
| 11:00-12:00 AM | | | | | | |
| 12:00-1:00 PM | | | | | | |
| 1:00-2:00 PM | | | | | | |
| 2:00-3:00 PM | | | | | | |
| 3:00-4:00 PM | | | | | | |
| 4:00-5:00 PM | | | | | | |
| 5:00-6:00 PM | | | | | | |
| 6:00-7:00 PM | | | | | | |
| 7:00-8:00 PM | | | | | | |

| | | | | | | |
|---------------------------------------|-------------------|------------------|----------------------|--------------------|------------------|--------------------|
| Please Print Name Clearly | | | | | | |
| Limit 6 Students Per Time Slot | | | | | | |
| Wednesday September 11, 2002 | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| Example | <i>John Smith</i> | <i>Jim Smith</i> | <i>Sally Johnson</i> | <i>Kim Johnson</i> | <i>Joe Brown</i> | <i>Chris Brown</i> |
| 8:00-9:00 AM | | | | | | |
| 9:00-10:00 AM | | | | | | |
| 10:00-11:00 AM | | | | | | |
| 11:00-12:00 AM | | | | | | |
| 12:00-1:00 PM | | | | | | |
| 1:00-2:00 PM | | | | | | |
| 2:00-3:00 PM | | | | | | |
| 3:00-4:00 PM | | | | | | |
| 4:00-5:00 PM | | | | | | |
| 5:00-6:00 PM | | | | | | |
| 6:00-7:00 PM | | | | | | |
| 7:00-8:00 PM | | | | | | |

JOSEPH D. BEAMS

Department of Accounting & Information Systems
3007 Pamplin Hall, Virginia Tech
Blacksburg, VA 24061
Phone: (540) 231-6591

P.O. Box 10668
Blacksburg, VA 24062
(540)552-4560 or (540)552-8866
Jobeams@vt.edu
Available Fall 2003

EDUCATION

Ph.D. in Business Administration (Major in Accounting)

Virginia Polytechnic Institute and State University, Blacksburg, VA, May 2003 (Expected)

Master of Accountancy - Concentration in Tax, University of Virginia, Charlottesville, VA, August 1994

B.S. in Accounting - University of Virginia - College at Wise, Wise, VA, May 1993

RESEARCH

Dissertation

"Insider Trading: A Study of Motivations and Deterrents." Proposal Defended: May 2002
Committee: Larry Killough (Chair), David Brinberg, Robert Brown, John Maher, Eugene Seago

Working Papers

Amoruso, A., J. Beams, and F. Richardson. "Stock-Based Compensation Reported by Firms Making Initial Public Offerings: An Examination of the Impact of SFAS 123." Submitted to *Accounting Horizons*, 26 manuscript pages.

Beams, J., L. Killough, and R. Brown. "The Determinants of Non-Compliance with Insider Trading Laws." Status - Revise and resubmit at *Journal of Business Ethics*, 29 manuscript pages.

TEACHING INTERESTS

Primary - Managerial/Tax

Secondary - Information Systems

Courses Taught (Virginia Tech)

Advanced Income Tax (Corporate, Partnerships, Estate, and Trusts)

Cost Accounting

Principles of Managerial Accounting

Principles of Financial Accounting

Introduction to Business Information Systems - First required information systems course

Personal Computers in Business - Second required information systems course

Seminars Developed and Taught (Roanoke County Adult Education)

Investing over the Internet - Trading, research, and managing assets over the Internet

Computerized Accounting - Integrating from manual to computerized bookkeeping for small business

PROFESSIONAL EXPERIENCE

Mid-Atlantic CPAs, LLC, Managing Member, Conducted all phases of developing and running the business and performing client services, 1996-1999

Firebaugh and Berry Inc., CPAs, Staff Accountant, Performed auditing of for profit and not for profit entities, individual, partnership and corporate taxation, as well as a variety of other activities, 1994-1996

SELECTED HONORS, AWARDS, OTHER ACTIVITIES

AAA Doctoral Consortium Fellow, 2001

AAA Scholarship

Virginia Society of CPAs Scholarship

Beta Alpha Psi (University of Virginia)

Beta Gamma Sigma (University of Virginia)

Passed all parts of CPA exam on first sitting, 700 GMAT Score (Taken once)

Placed 1st in Phi Beta Lambda Virginia Accounting Competition

Certified Public Accountant - Licensed in Virginia

SERVICE AND MEMBERSHIPS

Member of AAA, AICPA, IMA

President of Phi Beta Lambda Business Club (University of Virginia at Wise)

Seminar Series Committee (VA Tech Department of Accounting & Information Systems), 1999 -2001