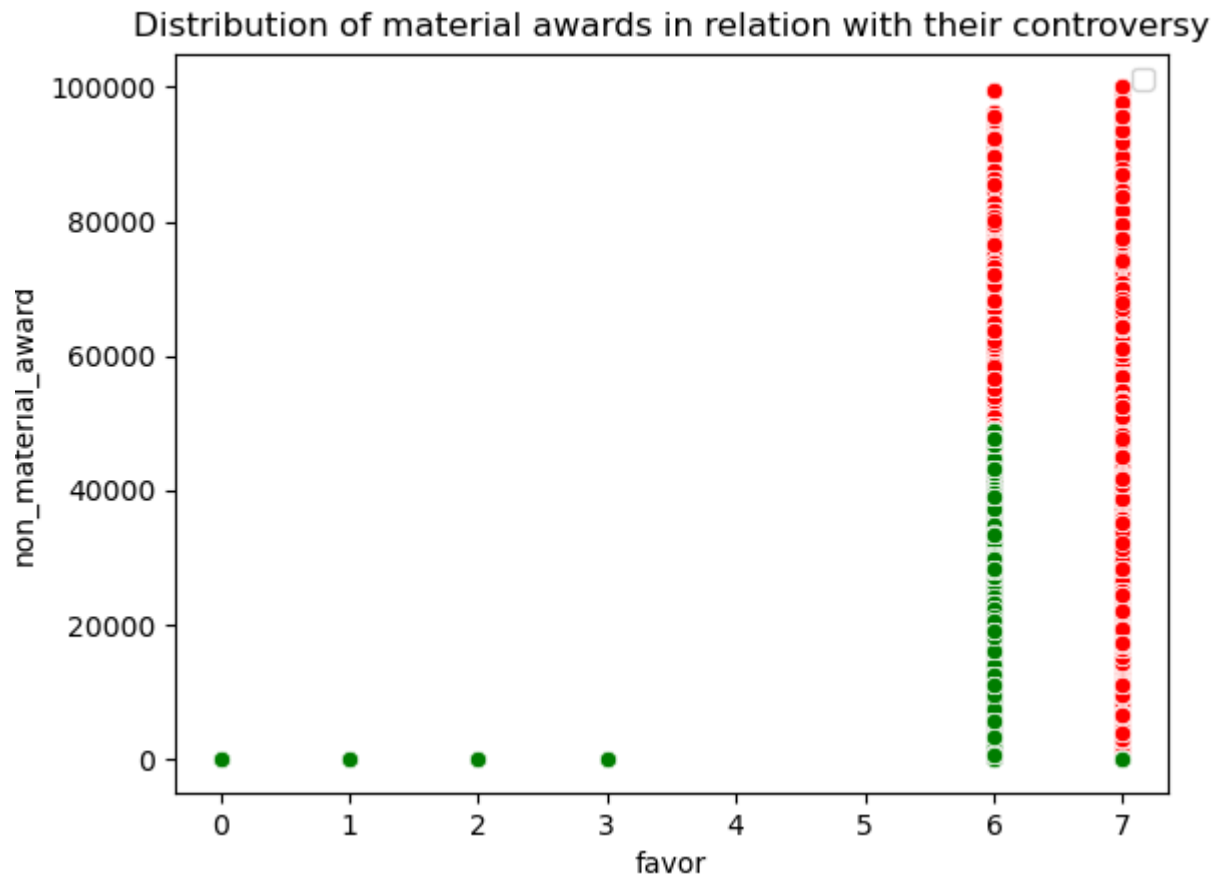


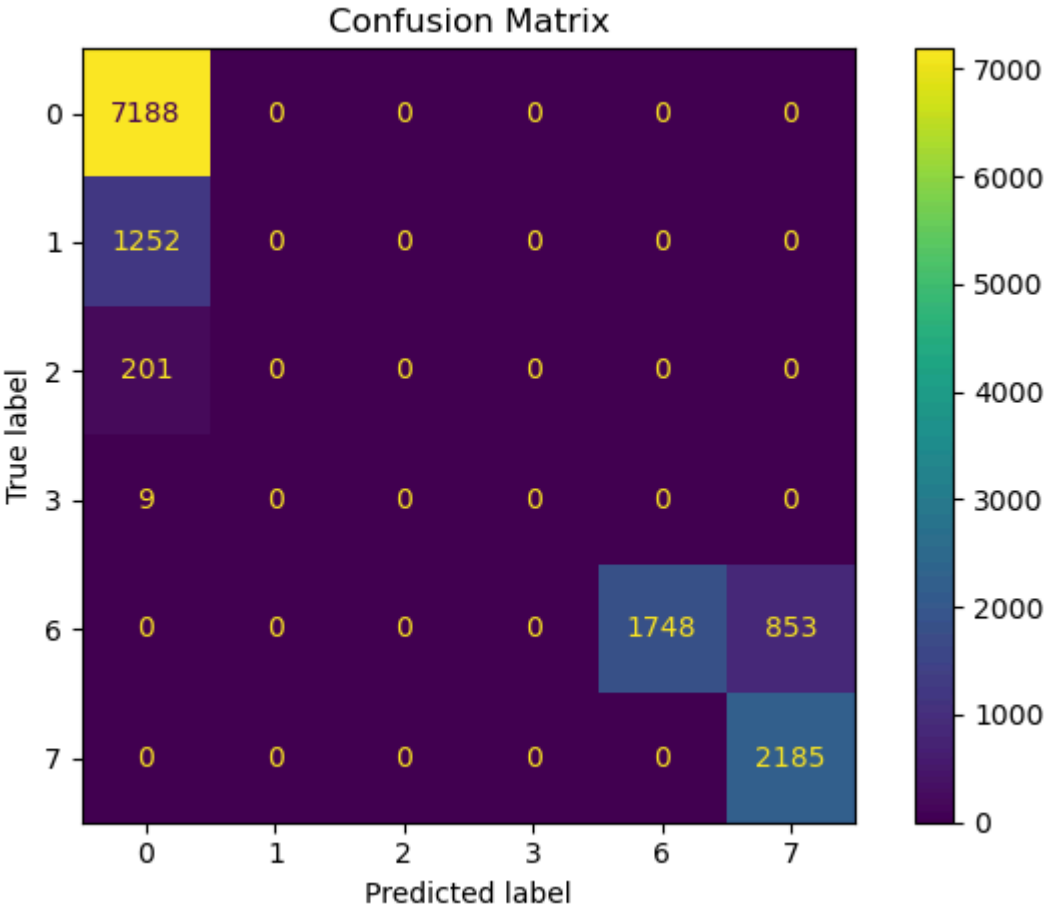
Analysis for the dataset "full"

Visualization of the dataset voting pattern, using('non_material_award', 'non_material_diff')



Confusion matrices demonstrating how voting patterns are impacted by contests in law and fact, using('contest_law', 'contest_fact', 'contest_lawres', 'contest_factres')

Accuracy: 0.8277016969336112



Linear regression on compensation data to assess significance of law and fact, using ('contest_law', 'contest_fact', 'contest_lawres', 'contest_factres')

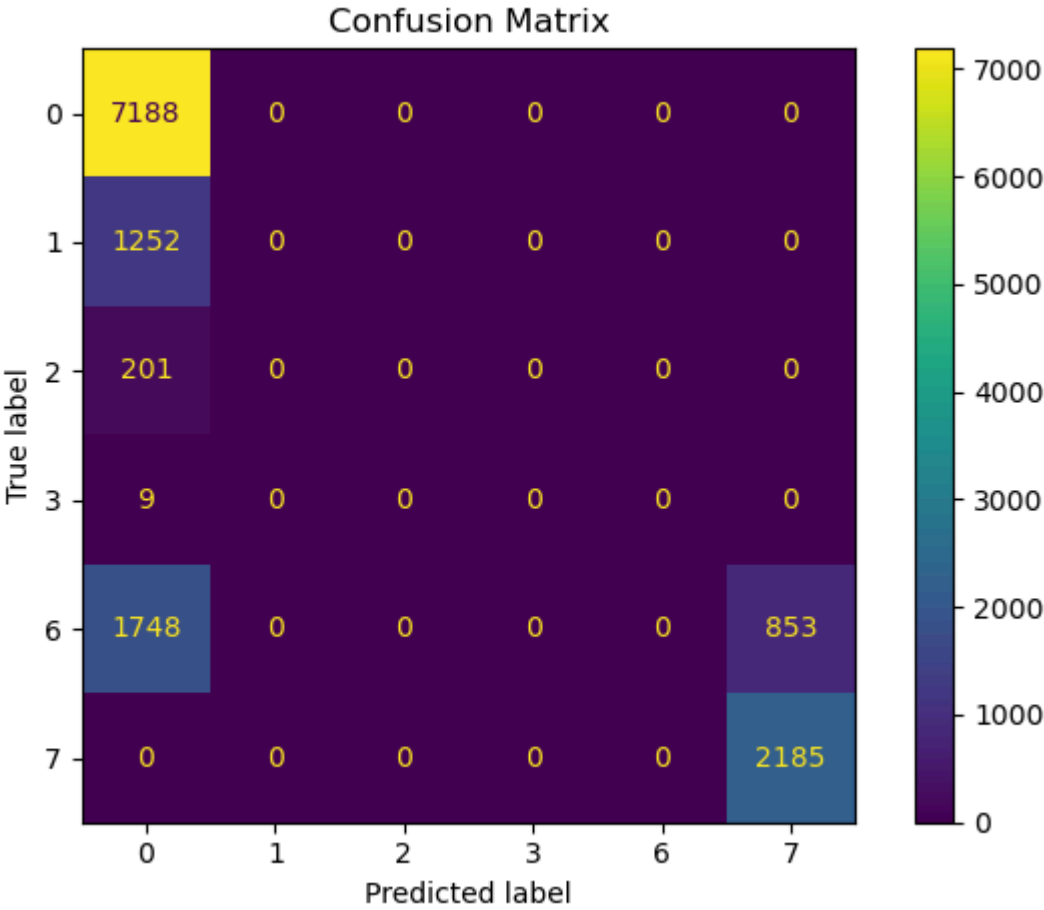
Mean Absolute Error (MAE): 3499.5569570800767

Mean Squared Error (MSE): 31146306.41527143

R-squared (R²): 0.44172353203304493

Confusion matrices demonstrating how voting patterns are impacted by contests in law('contest_law', 'contest_lawres')

Accuracy: 0.6976034534087526



Linear regression on compensation data to assess significance of law, using ('contest_law', 'contest_lawres')

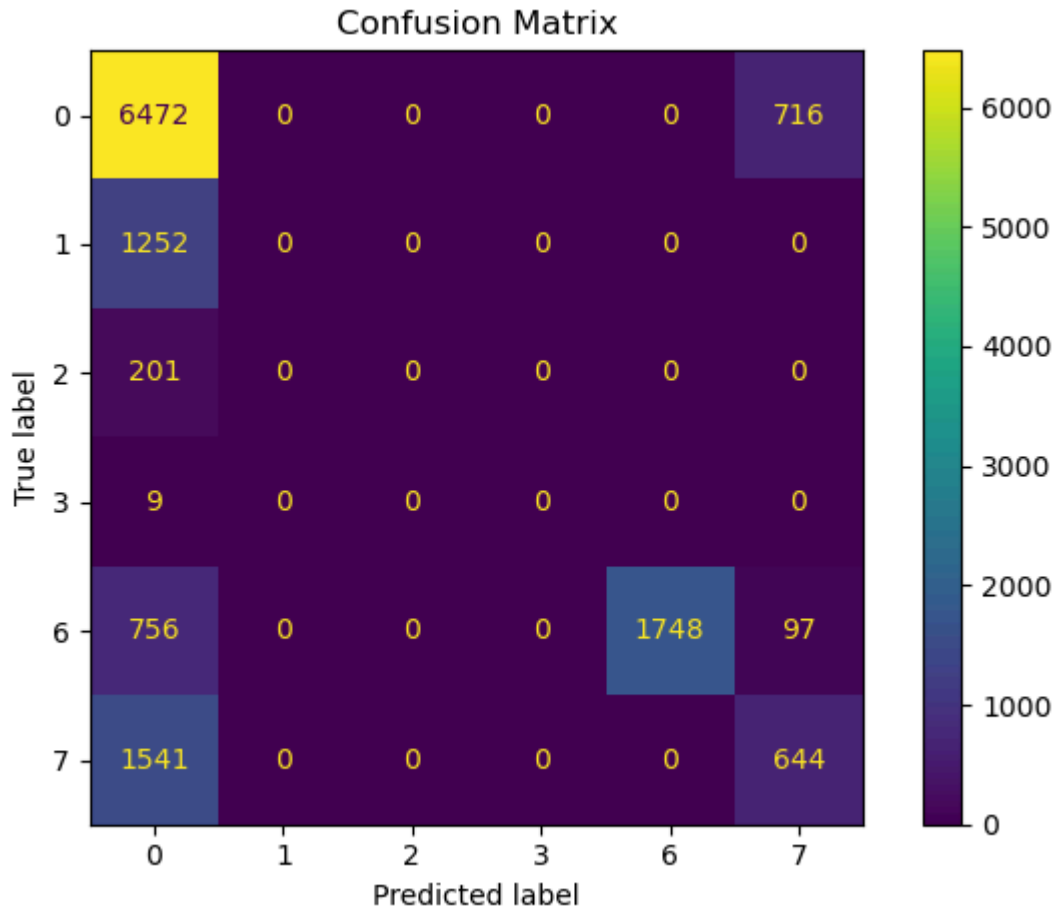
Mean Absolute Error (MAE): 4229.8812730450545

Mean Squared Error (MSE): 49781435.02863757

R-squared (R²): 0.10770146072641329

Confusion matrices demonstrating how voting patterns are impacted by contests in fact, using ('contest_fact', 'contest_factres')

Accuracy: 0.6597201548079785



Linear regression on compensation data to assess significance of fact, using ('contest_fact',)

Mean Absolute Error (MAE): 4799.856386025532

Mean Squared Error (MSE): 54945374.26362158

R-squared (R^2): 0.01514134401577416

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_law',)

Classification Report:

0 Precision: 0.82 Recall: 1.00 F1-Score: 0.90 Support: 54925.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 12254.00 Accuracy: 0.82 Macro Avg Precision: 0.41 Recall: 0.50 F1-Score: 0.45 Support: 67179.00 Weighted Avg Precision: 0.67 Recall: 0.82 F1-Score: 0.74 Support: 67179.00

Confusion Matrix:

Confusion Matrix: True Negative: 54925 False Positive: 0 False Negative: 12254 True Positive: 0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_factres',)

Classification Report:

0 Precision: 0.92 Recall: 0.85 F1-Score: 0.88 Support: 54925.00 1 Precision: 0.50 Recall: 0.66 F1-Score: 0.57 Support: 12254.00 Accuracy: 0.82 Macro Avg Precision: 0.71 Recall: 0.76 F1-Score: 0.73 Support: 67179.00 Weighted Avg Precision: 0.84 Recall: 0.82 F1-Score: 0.83 Support: 67179.00

Confusion Matrix:

Confusion Matrix: True Negative: 46884 False Positive: 8041 False Negative: 4181 True Positive: 8073

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_lawres',)

Classification Report:

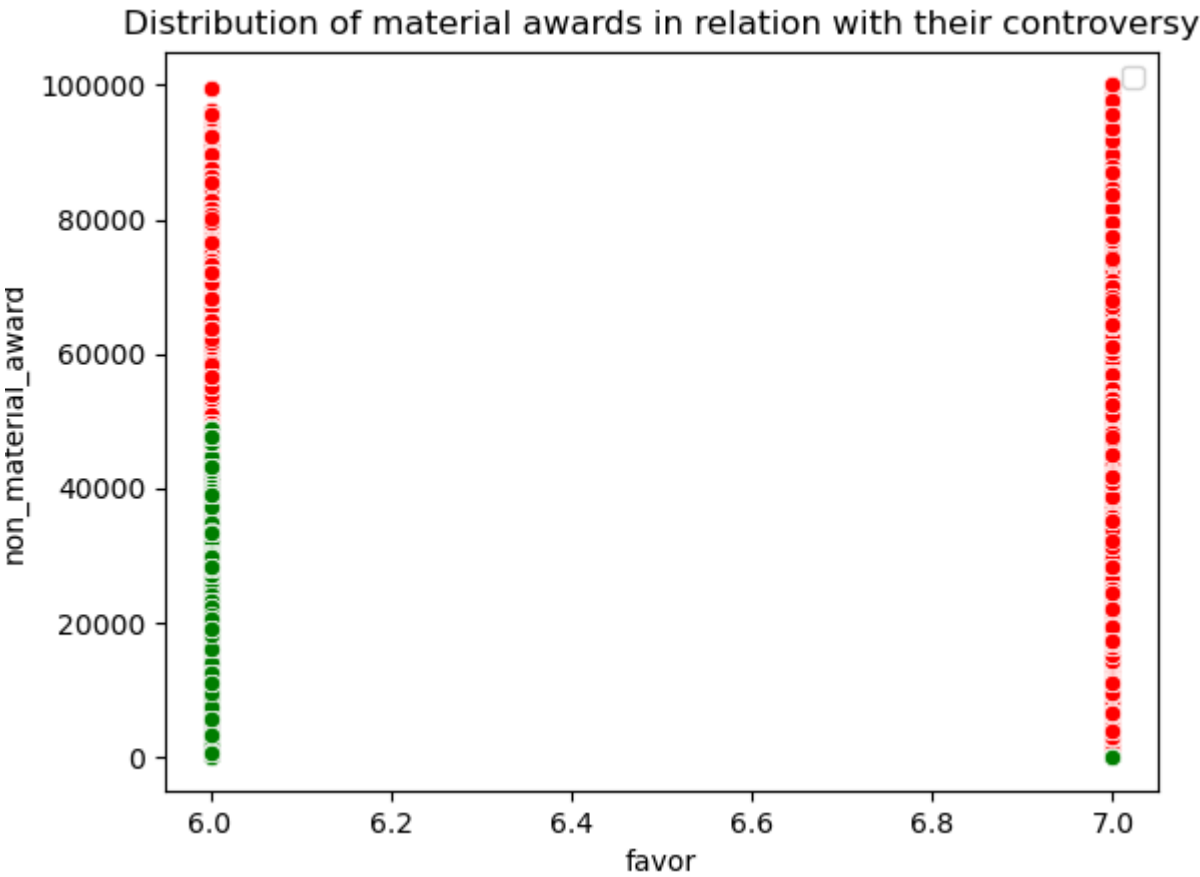
0 Precision: 0.82 Recall: 1.00 F1-Score: 0.90 Support: 54925.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 12254.00 Accuracy: 0.82 Macro Avg Precision: 0.41 Recall: 0.50 F1-Score: 0.45 Support: 67179.00 Weighted Avg Precision: 0.67 Recall: 0.82 F1-Score: 0.74 Support: 67179.00

Confusion Matrix:

Confusion Matrix: True Negative: 54925 False Positive: 0 False Negative: 12254 True Positive: 0

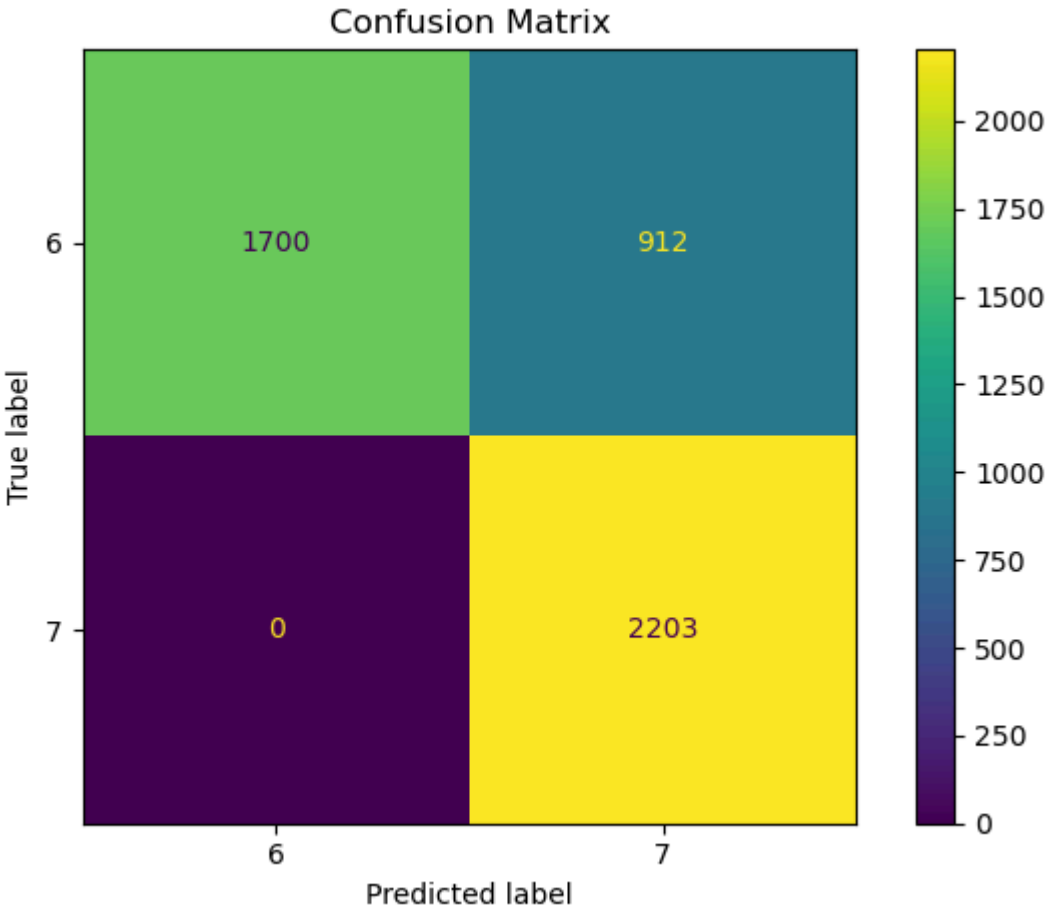
Analysis for the dataset "favoring applicant"

Visualization of the dataset voting pattern, using('non_material_award', 'non_material_diff')



Confusion matrices demonstrating how voting patterns are impacted by contests in law and fact, using('contest_law', 'contest_fact', 'contest_lawres', 'contest_factres')

Accuracy: 0.8105919003115265



Linear regression on compensation data to assess significance of law and fact, using ('contest_law',

'contest_fact', 'contest_lawres', 'contest_factres')

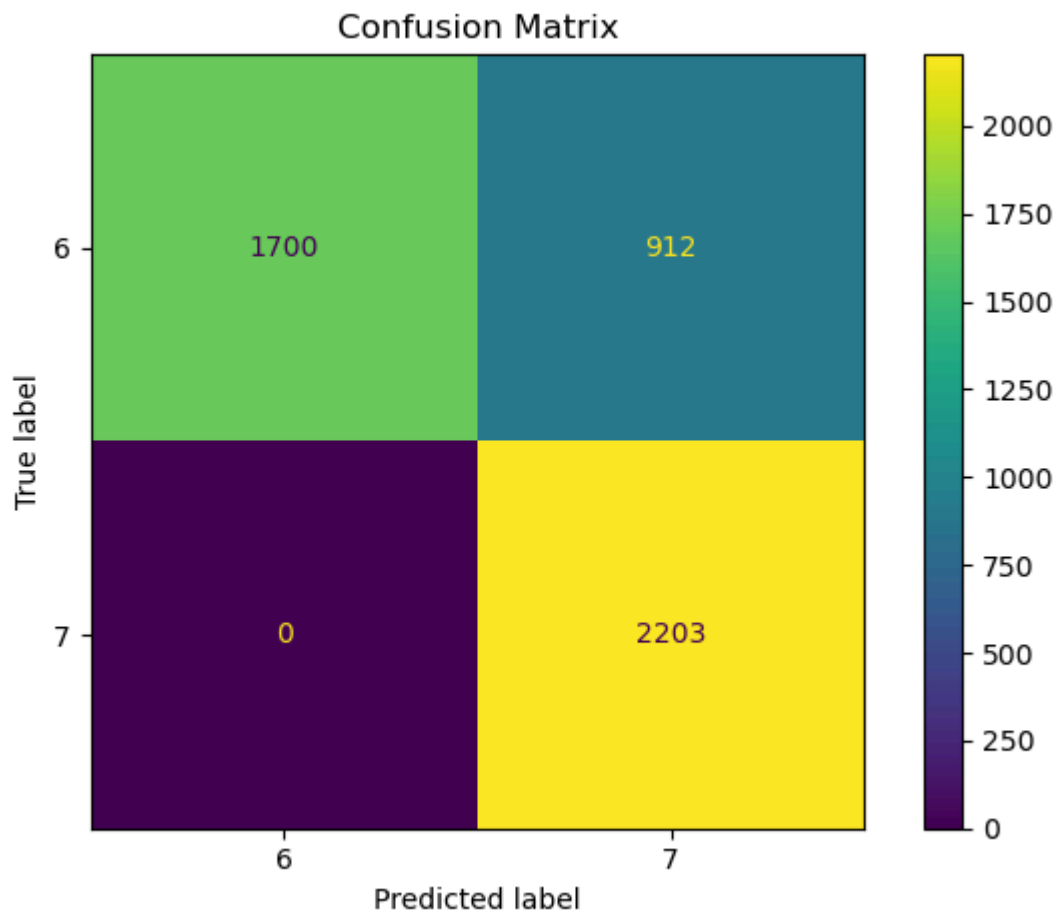
Mean Absolute Error (MAE): 8396.892079767931

Mean Squared Error (MSE): 107879278.10733755

R-squared (R^2): 0.06703082867595966

Confusion matrices demonstrating how voting patterns are impacted by contests in law('contest_law', 'contest_lawres')

Accuracy: 0.8105919003115265



Linear regression on compensation data to assess significance of law, using ('contest_law', 'contest_lawres')

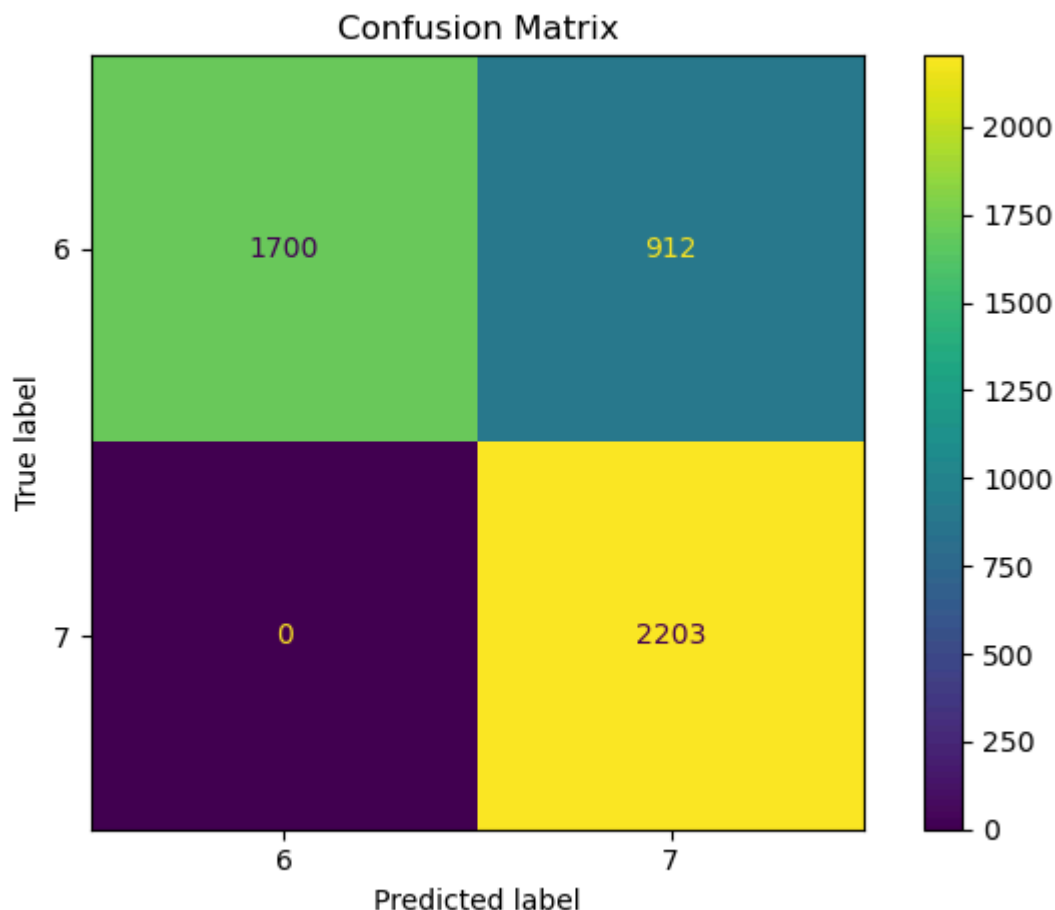
Mean Absolute Error (MAE): 8542.384569948357

Mean Squared Error (MSE): 109847145.44095097

R-squared (R^2): 0.05001217979614203

Confusion matrices demonstrating how voting patterns are impacted by contests in fact, using ('contest_fact', 'contest_factres')

Accuracy: 0.8105919003115265



Linear regression on compensation data to assess significance of fact, using ('contest_fact',)

Mean Absolute Error (MAE): 8542.384569948357

Mean Squared Error (MSE): 109847145.44095097

R-squared (R^2): 0.05001217979614203

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_law',)

Classification Report:

0 Precision: 0.86 Recall: 0.96 F1-Score: 0.91 Support: 13840.00 1 Precision: 0.93 Recall: 0.79 F1-Score: 0.85 Support: 10234.00 Accuracy: 0.89 Macro Avg Precision: 0.90 Recall: 0.87 F1-Score: 0.88 Support: 24074.00 Weighted Avg Precision: 0.89 Recall: 0.89 F1-Score: 0.88 Support: 24074.00

Confusion Matrix:

Confusion Matrix: True Negative: 13258 False Positive: 582 False Negative: 2170 True Positive: 8064

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_factres',)

Classification Report:

0 Precision: 0.81 Recall: 0.69 F1-Score: 0.75 Support: 13840.00 1 Precision: 0.65 Recall: 0.79 F1-Score: 0.71 Support: 10234.00 Accuracy: 0.73 Macro Avg Precision: 0.73 Recall: 0.74 F1-Score: 0.73 Support: 24074.00 Weighted Avg Precision: 0.74 Recall: 0.73 F1-Score: 0.73 Support: 24074.00

Confusion Matrix:

Confusion Matrix: True Negative: 9503 False Positive: 4337 False Negative: 2161 True Positive: 8073

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_lawres',)

Classification Report:

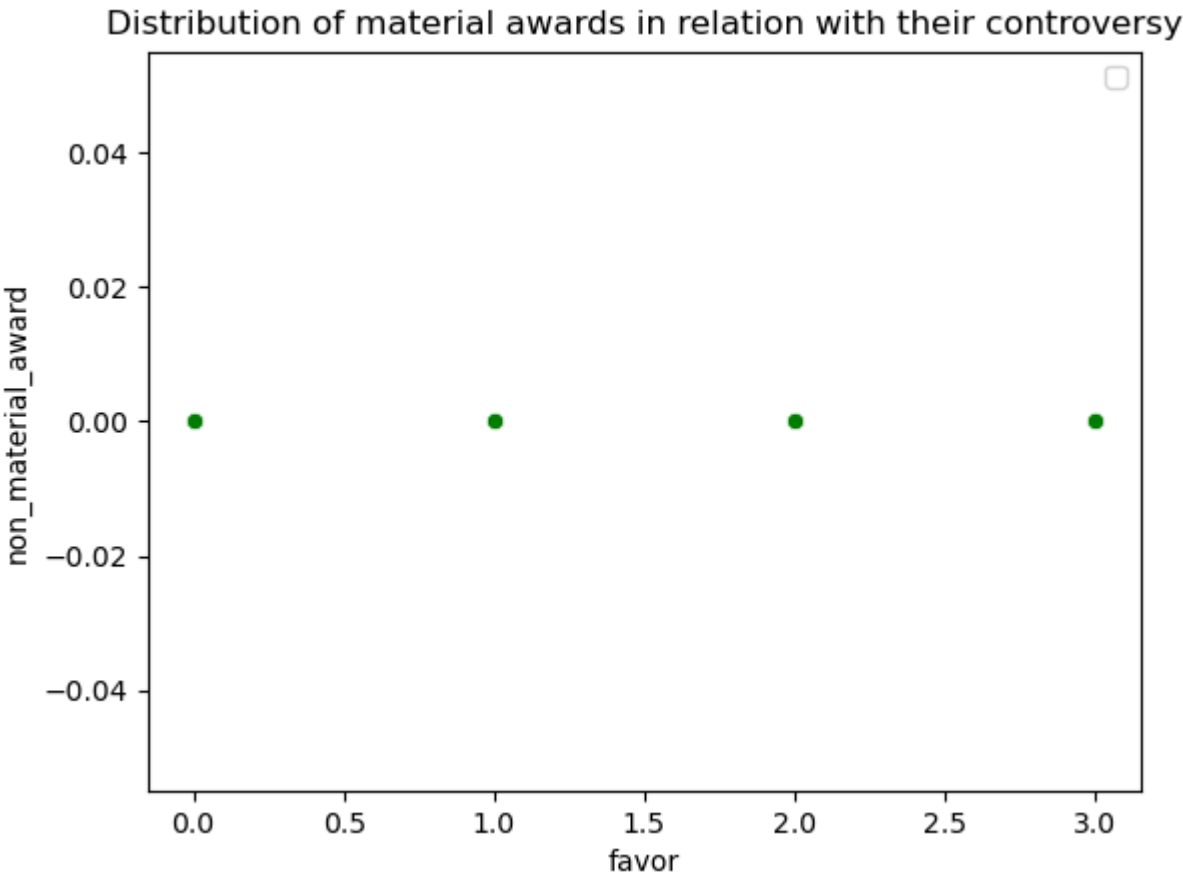
0 Precision: 0.86 Recall: 0.96 F1-Score: 0.91 Support: 13840.00 1 Precision: 0.93 Recall: 0.79 F1-Score: 0.85 Support: 10234.00 Accuracy: 0.89 Macro Avg Precision: 0.90 Recall: 0.87 F1-Score: 0.88 Support: 24074.00 Weighted Avg Precision: 0.89 Recall: 0.89 F1-Score: 0.88 Support: 24074.00

Confusion Matrix:

Confusion Matrix: True Negative: 13258 False Positive: 582 False Negative: 2170 True Positive: 8064

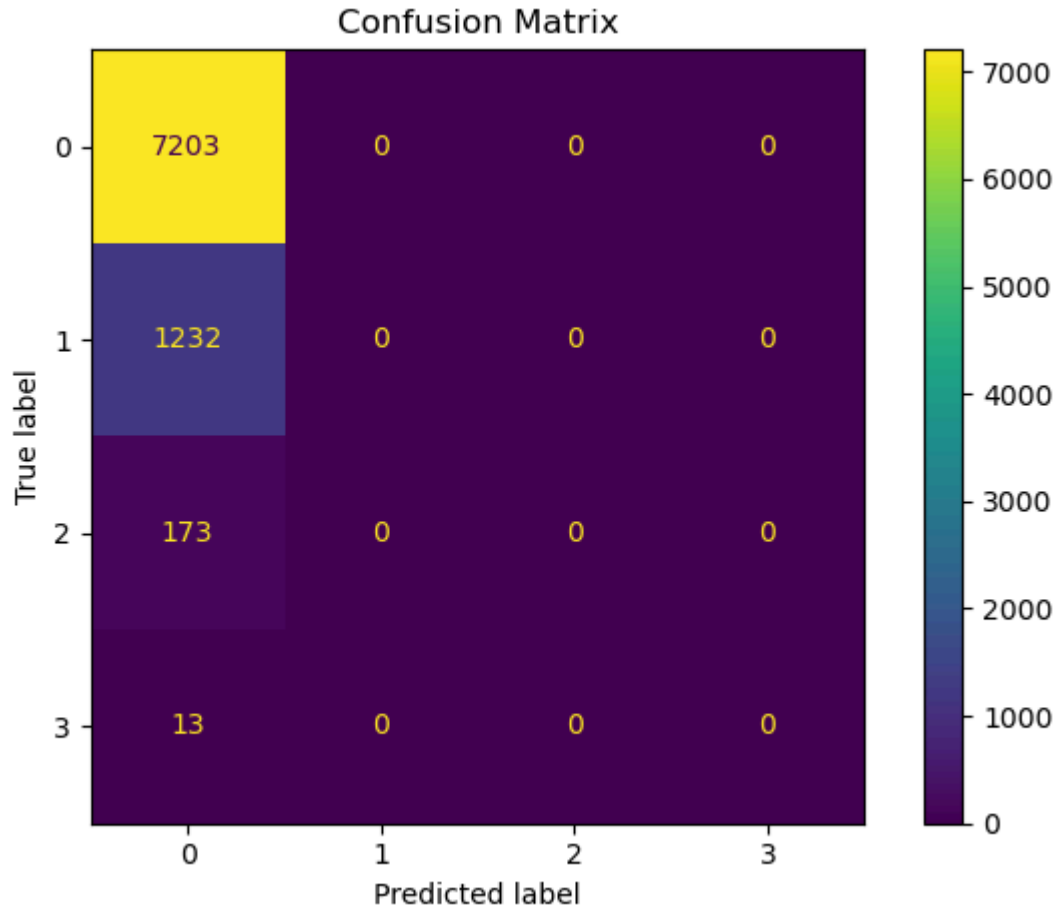
Analysis for the dataset "favoring respondent"

Visualization of the dataset voting pattern, using('non_material_award', 'non_material_diff')



Confusion matrices demonstrating how voting patterns are impacted by contests in law and fact, using('contest_law', 'contest_fact', 'contest_lawres', 'contest_factres')

Accuracy: 0.8355179213548313



Linear regression on compensation data to assess significance of law and fact, using ('contest_law',

'contest_fact', 'contest_lawres', 'contest_factres')

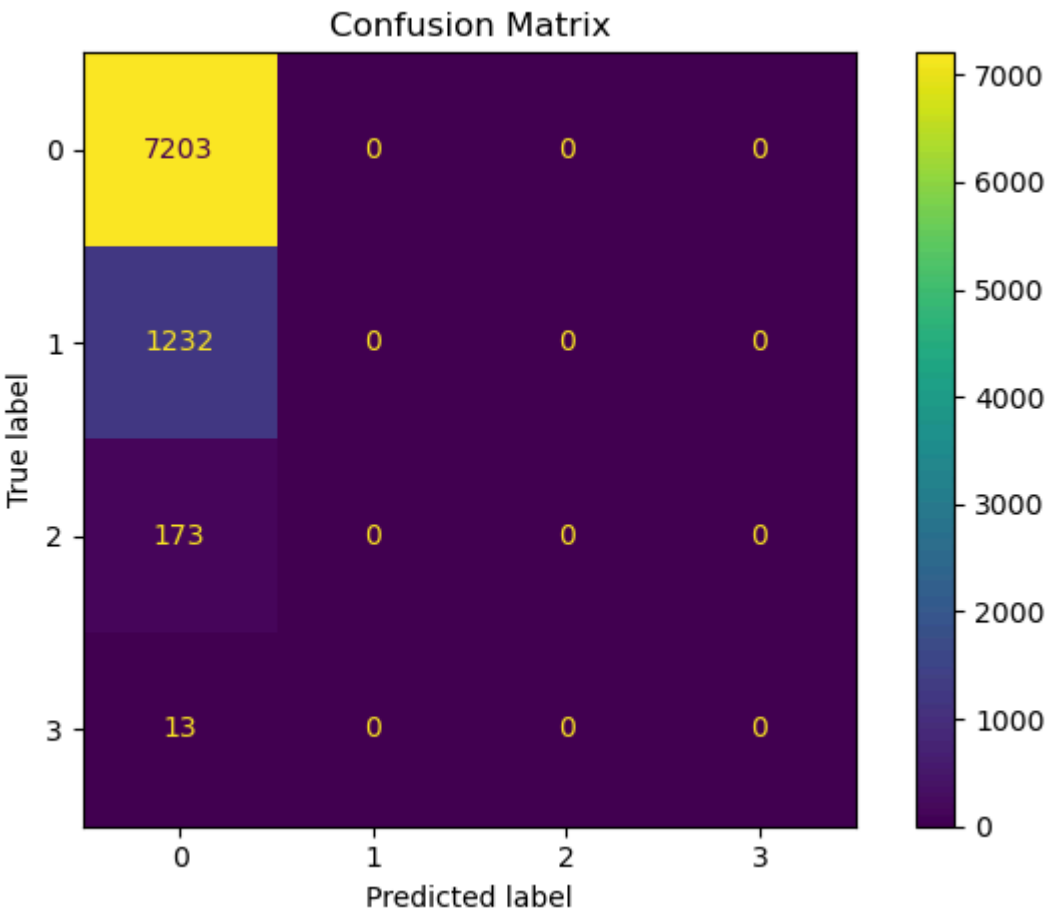
Mean Absolute Error (MAE): 0.0

Mean Squared Error (MSE): 0.0

R-squared (R²): 1.0

Confusion matrices demonstrating how voting patterns are impacted by contests in law('contest_law', 'contest_lawres')

Accuracy: 0.8355179213548313



Linear regression on compensation data to assess significance of law, using ('contest_law', 'contest_lawres')

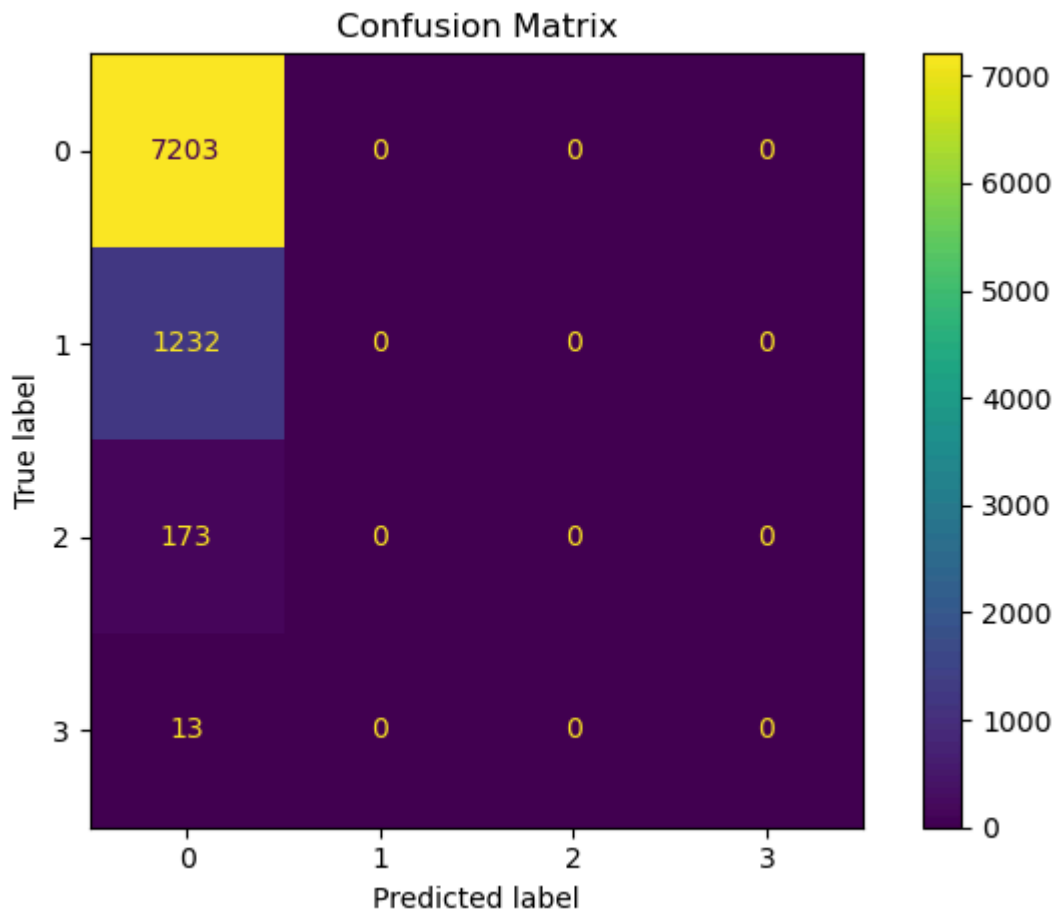
Mean Absolute Error (MAE): 0.0

Mean Squared Error (MSE): 0.0

R-squared (R²): 1.0

Confusion matrices demonstrating how voting patterns are impacted by contests in fact, using ('contest_fact', 'contest_factres')

Accuracy: 0.8355179213548313



Linear regression on compensation data to assess significance of fact, using ('contest_fact',)

Mean Absolute Error (MAE): 0.0

Mean Squared Error (MSE): 0.0

R-squared (R^2): 1.0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_law',)

Classification Report:

0 Precision: 0.95 Recall: 1.00 F1-Score: 0.98 Support: 41085.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 2020.00 Accuracy: 0.95 Macro Avg Precision: 0.48 Recall: 0.50 F1-Score: 0.49 Support: 43105.00 Weighted Avg Precision: 0.91 Recall: 0.95 F1-Score: 0.93 Support: 43105.00

Confusion Matrix:

Confusion Matrix: True Negative: 41085 False Positive: 0 False Negative: 2020 True Positive: 0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_factres',)

Classification Report:

0 Precision: 0.95 Recall: 1.00 F1-Score: 0.98 Support: 41085.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 2020.00 Accuracy: 0.95 Macro Avg Precision: 0.48 Recall: 0.50 F1-Score: 0.49 Support: 43105.00 Weighted Avg Precision: 0.91 Recall: 0.95 F1-Score: 0.93 Support: 43105.00

Confusion Matrix:

Confusion Matrix: True Negative: 41085 False Positive: 0 False Negative: 2020 True Positive: 0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_lawres',)

Classification Report:

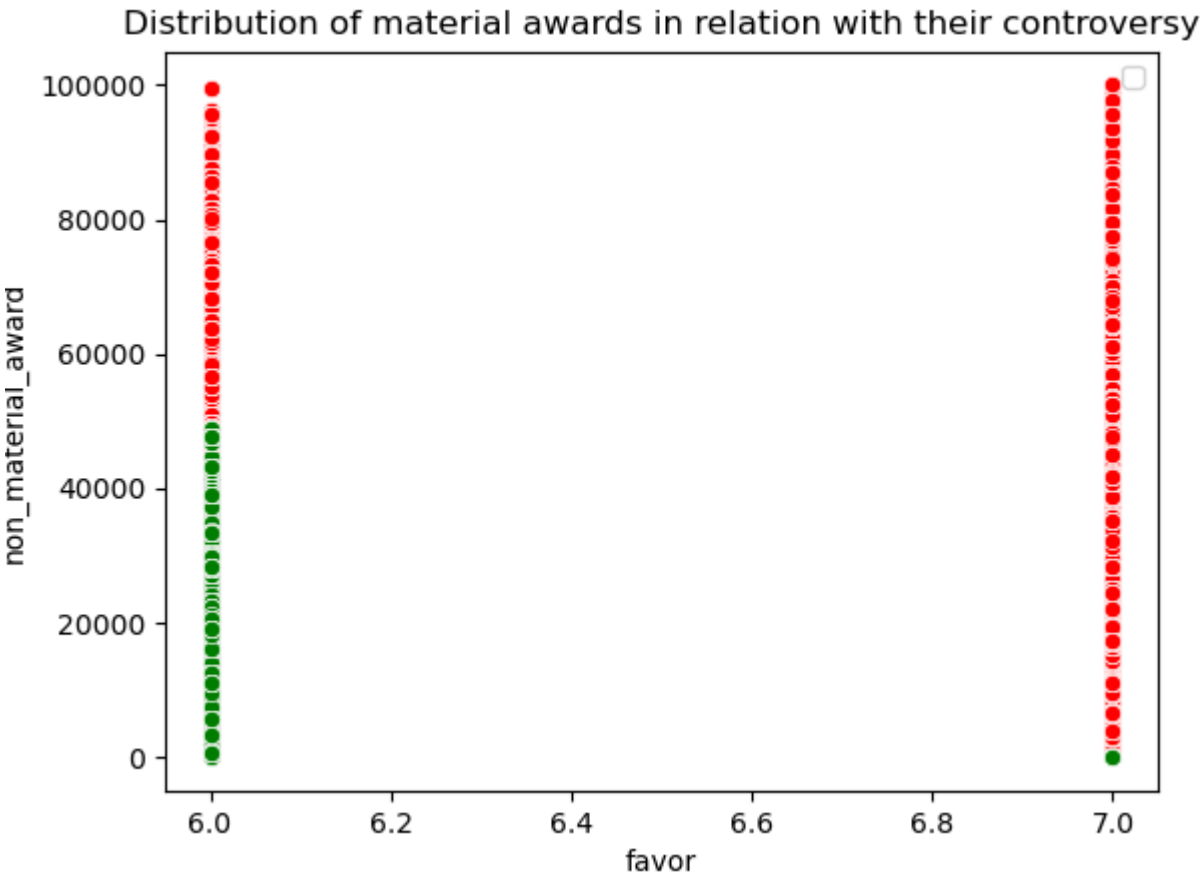
0 Precision: 0.95 Recall: 1.00 F1-Score: 0.98 Support: 41085.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 2020.00 Accuracy: 0.95 Macro Avg Precision: 0.48 Recall: 0.50 F1-Score: 0.49 Support: 43105.00 Weighted Avg Precision: 0.91 Recall: 0.95 F1-Score: 0.93 Support: 43105.00

Confusion Matrix:

Confusion Matrix: True Negative: 41085 False Positive: 0 False Negative: 2020 True Positive: 0

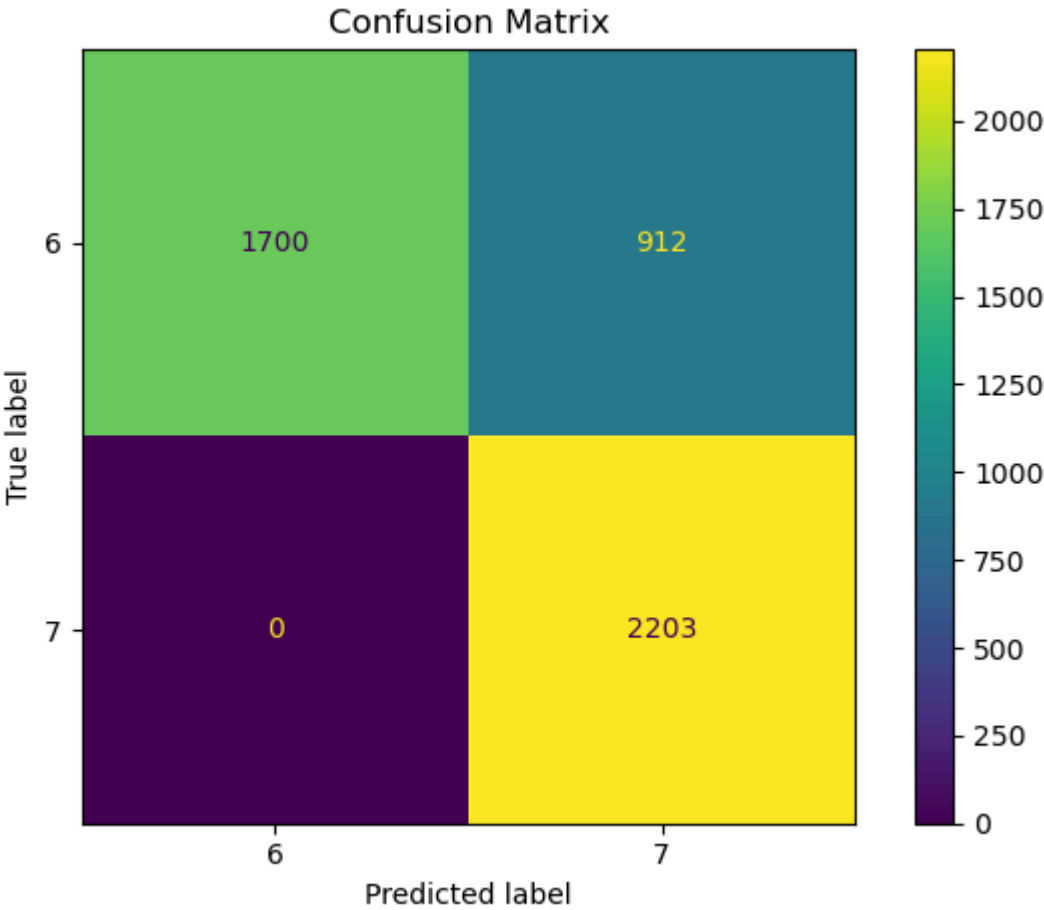
Analysis for the dataset "circumstances favoring applicant"

Visualization of the dataset voting pattern, using('non_material_award', 'non_material_diff')



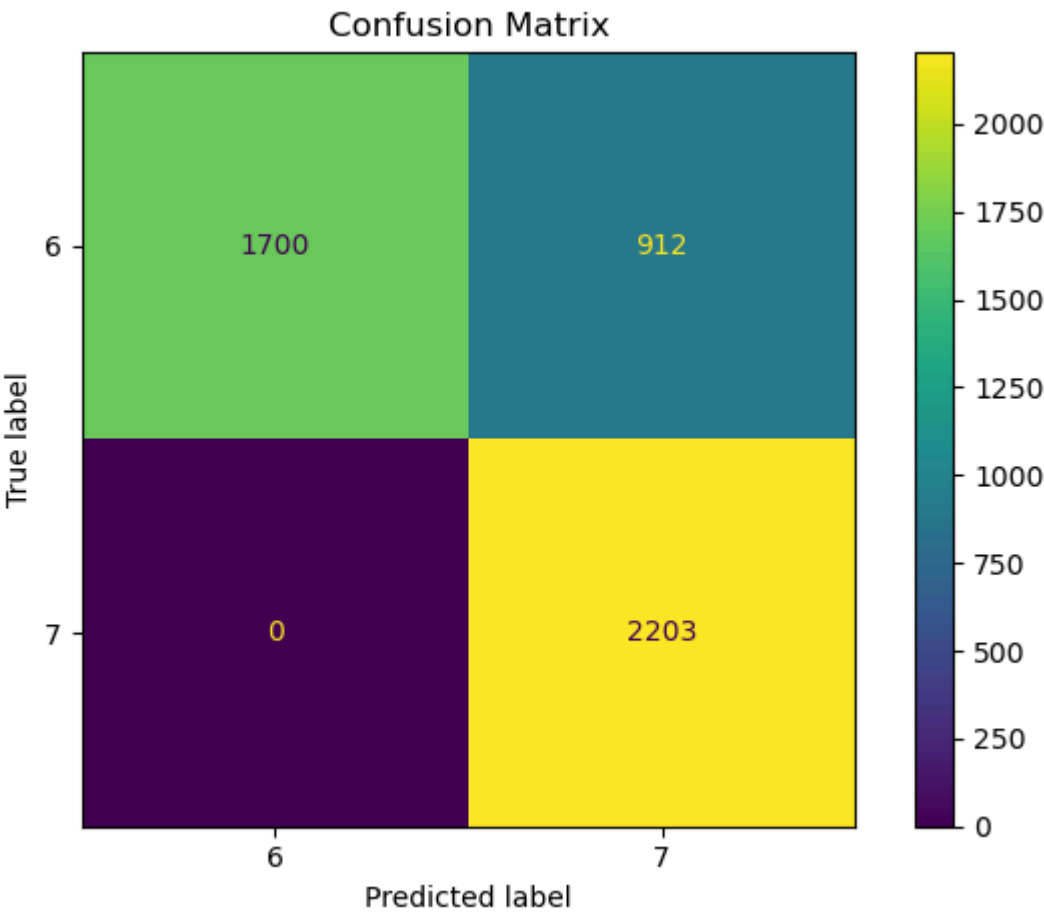
Confusion matrices demonstrating how voting patterns are impacted by contests in law and fact, using('contest_law', 'contest_fact', 'contest_lawres', 'contest_factres')

Accuracy: 0.8105919003115265

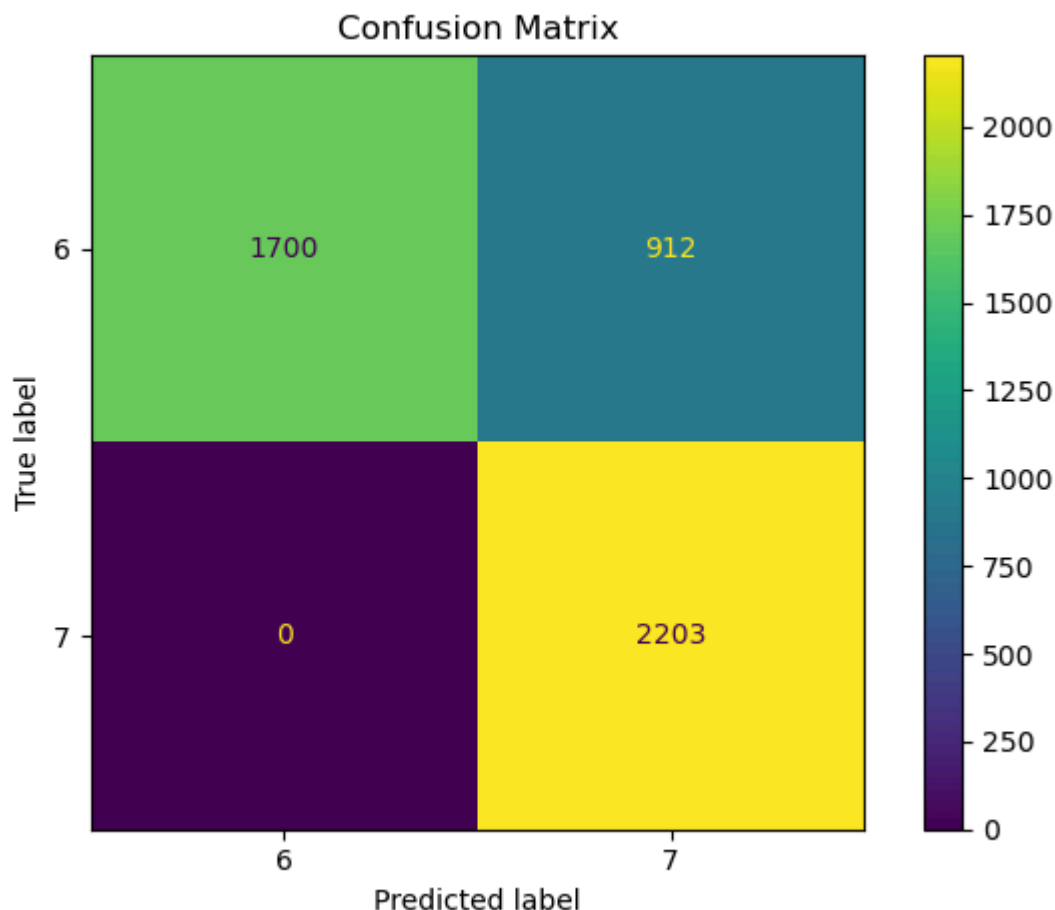


Linear regression on compensation data to assess significance of law and fact, using ('contest_law',

'contest_fact', 'contest_lawres', 'contest_factres')
Mean Absolute Error (MAE): 8396.892079767931
Mean Squared Error (MSE): 107879278.10733755
R-squared (R²): 0.06703082867595966
Confusion matrices demonstrating how voting patterns are impacted by contests in law('contest_law', 'contest_lawres')
Accuracy: 0.8105919003115265



Linear regression on compensation data to assess significance of law, using ('contest_law', 'contest_lawres')
Mean Absolute Error (MAE): 8542.384569948357
Mean Squared Error (MSE): 109847145.44095097
R-squared (R²): 0.05001217979614203
Confusion matrices demonstrating how voting patterns are impacted by contests in fact, using ('contest_fact', 'contest_factres')
Accuracy: 0.8105919003115265



Linear regression on compensation data to assess significance of fact, using ('contest_fact',)

Mean Absolute Error (MAE): 8542.384569948357

Mean Squared Error (MSE): 109847145.44095097

R-squared (R^2): 0.05001217979614203

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_law',)

Classification Report:

0 Precision: 0.86 Recall: 0.96 F1-Score: 0.91 Support: 13840.00 1 Precision: 0.93 Recall: 0.79 F1-Score: 0.85 Support: 10234.00 Accuracy: 0.89 Macro Avg Precision: 0.90 Recall: 0.87 F1-Score: 0.88 Support: 24074.00 Weighted Avg Precision: 0.89 Recall: 0.89 F1-Score: 0.88 Support: 24074.00

Confusion Matrix:

Confusion Matrix: True Negative: 13258 False Positive: 582 False Negative: 2170 True Positive: 8064

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_factres',)

Classification Report:

0 Precision: 0.81 Recall: 0.69 F1-Score: 0.75 Support: 13840.00 1 Precision: 0.65 Recall: 0.79 F1-Score: 0.71 Support: 10234.00 Accuracy: 0.73 Macro Avg Precision: 0.73 Recall: 0.74 F1-Score: 0.73 Support: 24074.00 Weighted Avg Precision: 0.74 Recall: 0.73 F1-Score: 0.73 Support: 24074.00

Confusion Matrix:

Confusion Matrix: True Negative: 9503 False Positive: 4337 False Negative: 2161 True Positive: 8073

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_lawres',)

Classification Report:

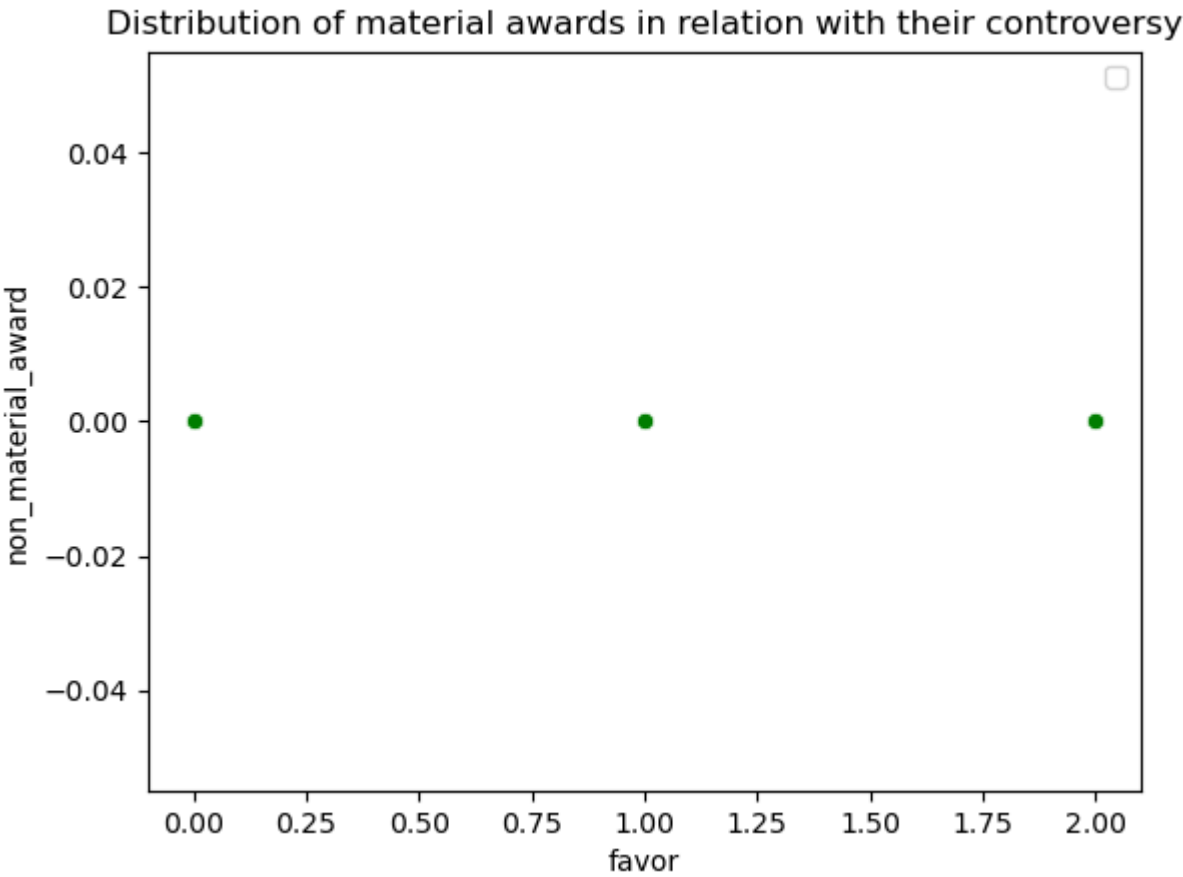
0 Precision: 0.86 Recall: 0.96 F1-Score: 0.91 Support: 13840.00 1 Precision: 0.93 Recall: 0.79 F1-Score: 0.85 Support: 10234.00 Accuracy: 0.89 Macro Avg Precision: 0.90 Recall: 0.87 F1-Score: 0.88 Support: 24074.00 Weighted Avg Precision: 0.89 Recall: 0.89 F1-Score: 0.88 Support: 24074.00

Confusion Matrix:

Confusion Matrix: True Negative: 13258 False Positive: 582 False Negative: 2170 True Positive: 8064

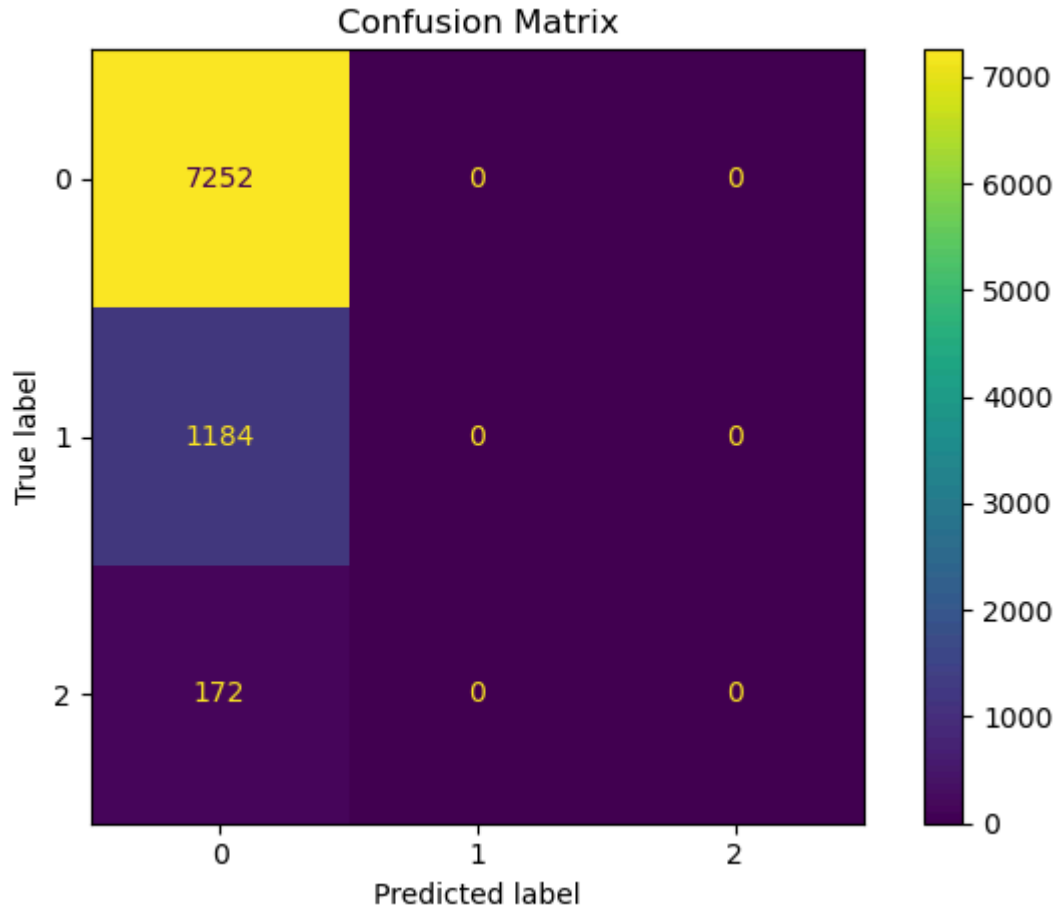
Analysis for the dataset "circumstances favoring respondent"

Visualization of the dataset voting pattern, using('non_material_award', 'non_material_diff')



Confusion matrices demonstrating how voting patterns are impacted by contests in law and fact, using('contest_law', 'contest_fact', 'contest_lawres', 'contest_factres')

Accuracy: 0.8424721189591078



Linear regression on compensation data to assess significance of law and fact, using ('contest_law',

'contest_fact', 'contest_lawres', 'contest_factres')

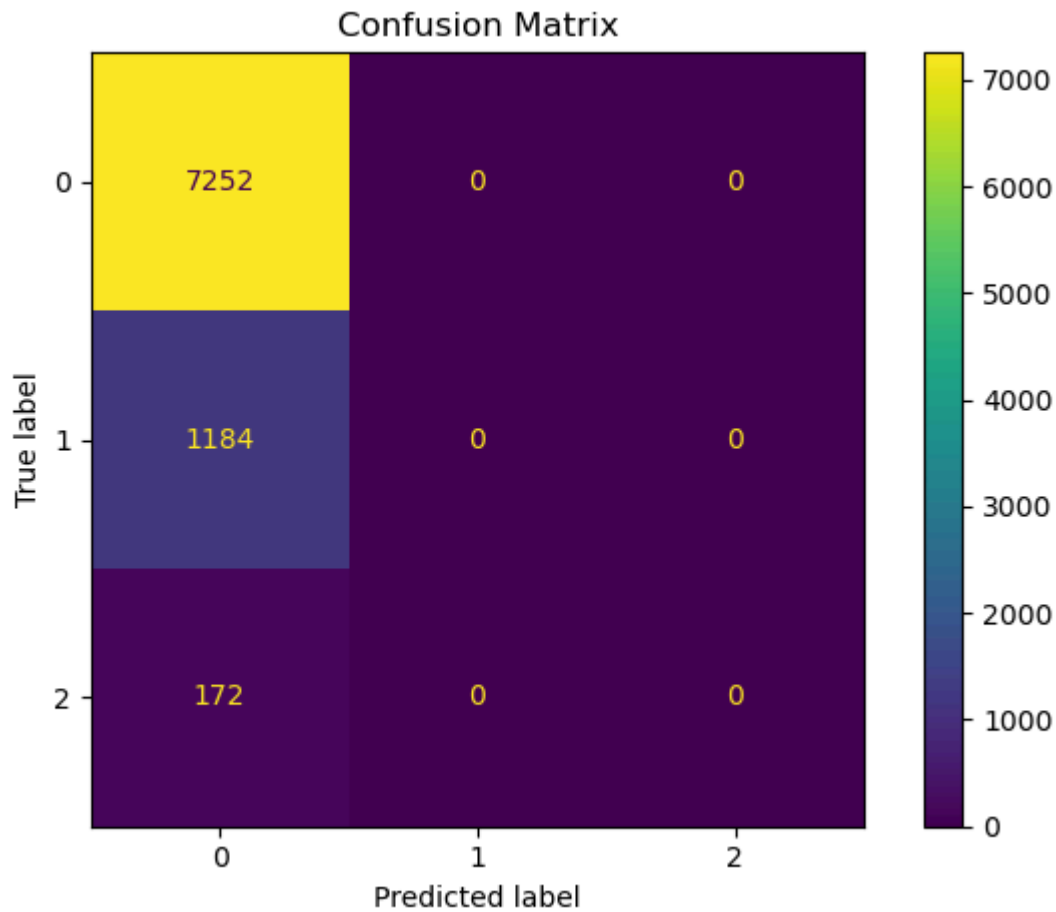
Mean Absolute Error (MAE): 0.0

Mean Squared Error (MSE): 0.0

R-squared (R^2): 1.0

Confusion matrices demonstrating how voting patterns are impacted by contests in law('contest_law', 'contest_lawres')

Accuracy: 0.8424721189591078



Linear regression on compensation data to assess significance of law, using ('contest_law', 'contest_lawres')

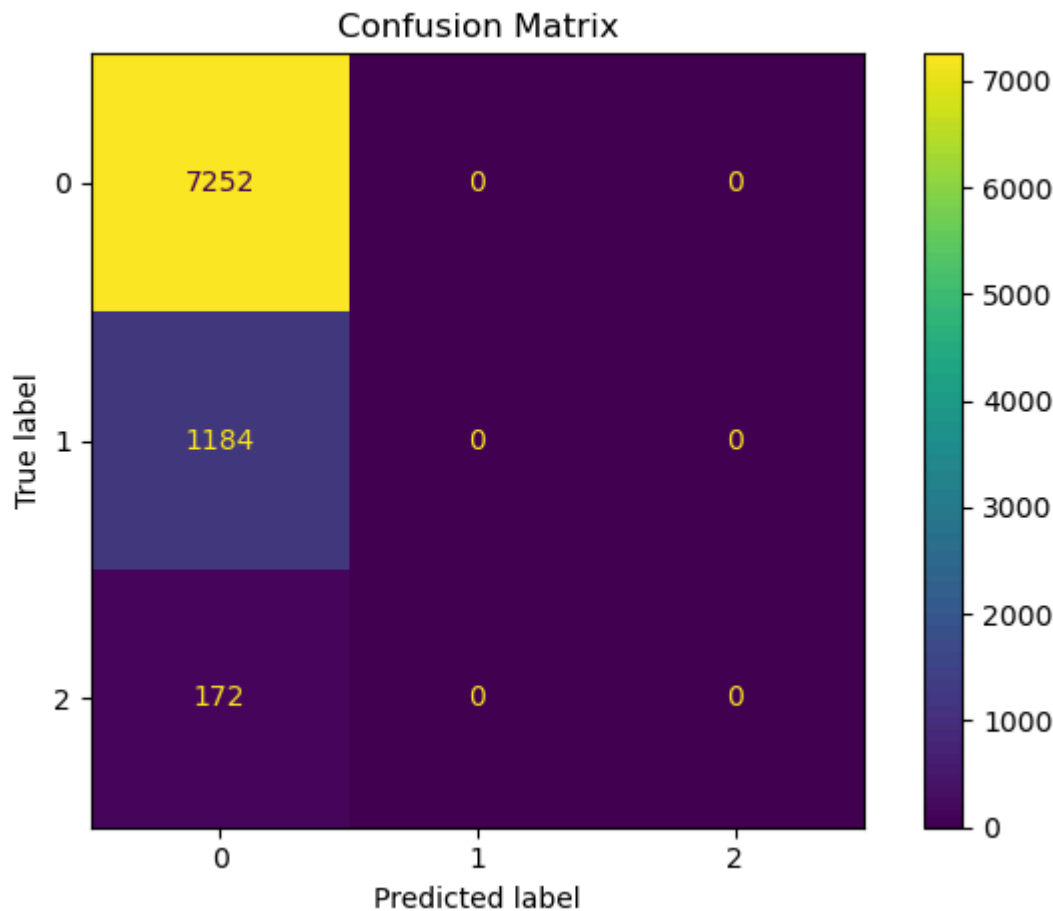
Mean Absolute Error (MAE): 0.0

Mean Squared Error (MSE): 0.0

R-squared (R^2): 1.0

Confusion matrices demonstrating how voting patterns are impacted by contests in fact, using ('contest_fact', 'contest_factres')

Accuracy: 0.8424721189591078



Linear regression on compensation data to assess significance of fact, using ('contest_fact',)

Mean Absolute Error (MAE): 0.0

Mean Squared Error (MSE): 0.0

R-squared (R^2): 1.0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_law',)

Classification Report:

0 Precision: 0.95 Recall: 1.00 F1-Score: 0.98 Support: 41081.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 1959.00 Accuracy: 0.95 Macro Avg Precision: 0.48 Recall: 0.50 F1-Score: 0.49 Support: 43040.00 Weighted Avg Precision: 0.91 Recall: 0.95 F1-Score: 0.93 Support: 43040.00

Confusion Matrix:

Confusion Matrix: True Negative: 41081 False Positive: 0 False Negative: 1959 True Positive: 0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_factres',)

Classification Report:

0 Precision: 0.95 Recall: 1.00 F1-Score: 0.98 Support: 41081.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 1959.00 Accuracy: 0.95 Macro Avg Precision: 0.48 Recall: 0.50 F1-Score: 0.49 Support: 43040.00 Weighted Avg Precision: 0.91 Recall: 0.95 F1-Score: 0.93 Support: 43040.00

Confusion Matrix:

Confusion Matrix: True Negative: 41081 False Positive: 0 False Negative: 1959 True Positive: 0

Logistic regression denoting the relationship between dissenting and separate and vote tally, using ('contest_lawres',)

Classification Report:

0 Precision: 0.95 Recall: 1.00 F1-Score: 0.98 Support: 41081.00 1 Precision: 0.00 Recall: 0.00 F1-Score: 0.00 Support: 1959.00 Accuracy: 0.95 Macro Avg Precision: 0.48 Recall: 0.50 F1-Score: 0.49 Support: 43040.00 Weighted Avg Precision: 0.91 Recall: 0.95 F1-Score: 0.93 Support: 43040.00

Confusion Matrix:

Confusion Matrix: True Negative: 41081 False Positive: 0 False Negative: 1959 True Positive: 0