

REPORT

Impact of Economic Indicators on State Revenue: An Econometric Analysis Comparative Case Studies of New Jersey and California

Introduction:

The data represents quarterly financial and tax-related metrics for the state of New Jersey (NJ) and California (separate dataset for NJ & CA) spanning the years 1997 to 2023, T. The dataset includes information such as State Revenue as the target variable, The other features are:

- State: Represents the state where the data is recorded.
- Year: Indicates the calendar year for the data.
- Quarter: Represents the quarter (1, 2, 3, or 4) of the year in which the data is recorded.
- AvgTaxRate: Represents the average tax rate over the past 12 months, expressed as a percentage.
- TaxRateRank: Indicates the rank of the average tax rate over the past 12 months among other states.
- AvgTaxRateOnWages: Reflects the average tax rate on taxable wages over the past 12 months, expressed as a percentage.
- AvgTaxRateOnWagesRank: Indicates the rank of the average tax rate on taxable wages over the past 12 months among other states.
- MinTaxWage: Represents the taxable wage base, which is the maximum amount of earnings subject to a particular tax.
- TrustFund: Reflects the balance in the trust fund.
- TFPerWages: Indicates the trust fund balance as a percentage of total wages.
- TFWagesRank: Indicates the rank of the trust fund balance among other states based on total wages.
- Interest: Represents the interest earned on the trust fund.
- HighCostMultiple: Reflects the high-cost multiple.
- AvgHCM: Represents the average high cost multiple ACHM.
- AvgHCMRank: Indicates the rank of the average high cost multiple ACHM among other states.

EXPLORATORY DATA ANALYSIS:

We have omitted the rows that have NA values and excluded the state column because the whole dataset is for both New Jersey and California datasets.

After all the omitted rows, the dimension of the NJ dataset is with 85 rows and 15 columns and CA dataset is with 106 rows and 15 columns.

The below plot is GGPAIRS, which shows the correlation coefficient between the two variables. The correlation coefficient measures the strength and direction of the linear relationship between two variables. It can be useful in understanding how variables are related to each other.

- If the correlation coefficient is close to 1, it indicates a strong positive linear relationship. This means that if one variable increases, the other tends to increase as well.
- If the correlation coefficient is close to -1, it indicates a strong negative linear relationship.
- If the correlation coefficient is close to 0, it suggests a weak or no linear relationship between the variables.

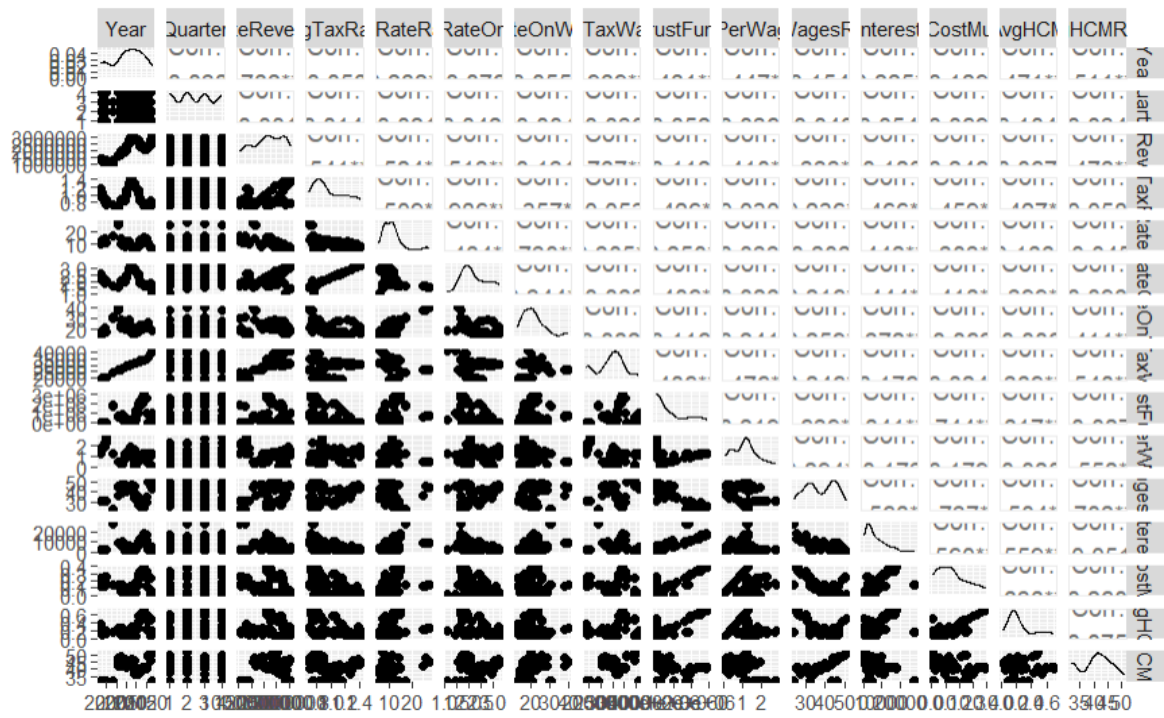


Fig1: NJ correlation coefficient

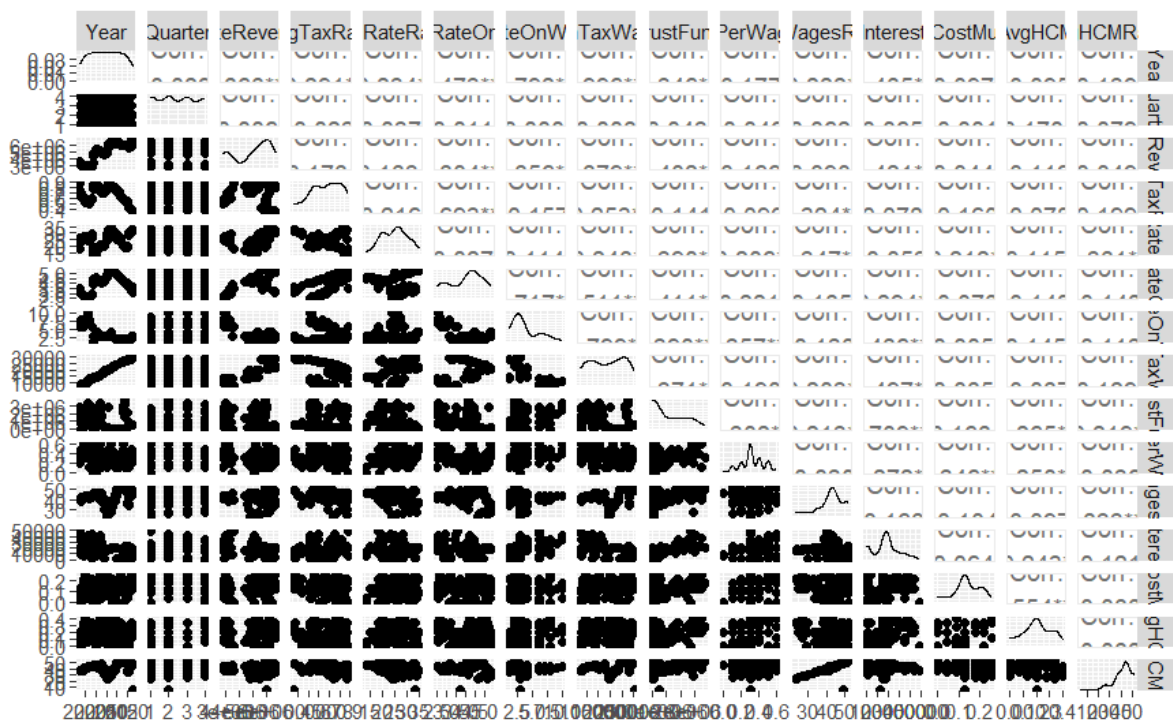


Fig 2: CA Correlation Coefficient

SKEWNESS:

	Skewness <dbl>
Year	-0.32471706
Quarter	0.03321954
StateRevenue	-0.25330234
AvgTaxRate	0.60440272
TaxRateRank	2.02511992
AvgTaxRateOnWages	0.50782532
AvgTaxRateOnWagesRank	1.30941179
MinTaxWage	-0.26671923
TrustFund	1.15730964
TFPerWages	0.42454353

Fig: NJ skewness

The above screenshot shows the skewness of all the features except state. We can say that

- AvgTaxRate, TaxRateRank, AvgTaxRateOnWages, AvgTaxRateOnWagesRank, TrustFund, TFPerWages are positively skewed.
- Year, StateRevenue, MinTaxWage, are negatively skewed.

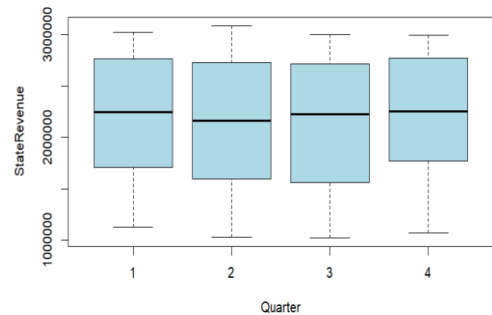
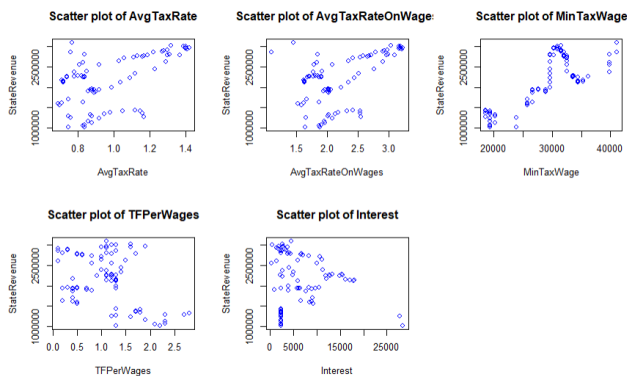
	Skewness <dbl>
Year	0.003640932
Quarter	0.026622276
StateRevenue	-0.590206076
AvgTaxRate	-0.340367096
TaxRateRank	-0.069714033
AvgTaxRateOnWages	-0.316222967
AvgTaxRateOnWagesRank	1.054706166
MinTaxWage	-0.080216599
TrustFund	0.644150464
TFPerWages	-0.039600597

Fig: CA skewness

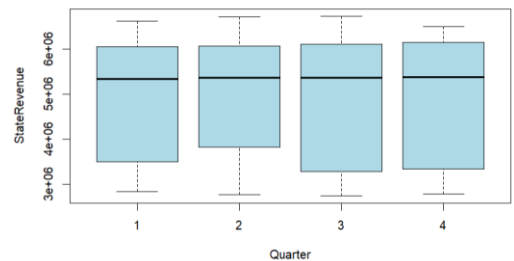
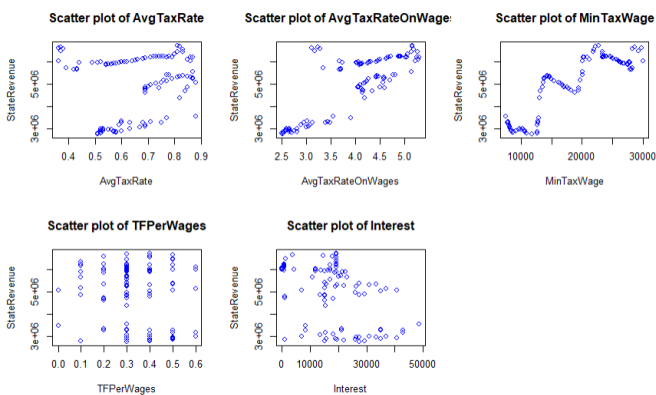
The above screenshot shows the skewness of all the features except state. We can say that

- AvgTaxRateOnWages, AvgTaxRateOnWagesRank, TrustFund, TFPerWages are positively skewed.
- Year, StateRevenue, AvgTaxRate, TaxRateRank, MinTaxWage, are negatively skewed.

Scatter Plots and box plots of Datasets:

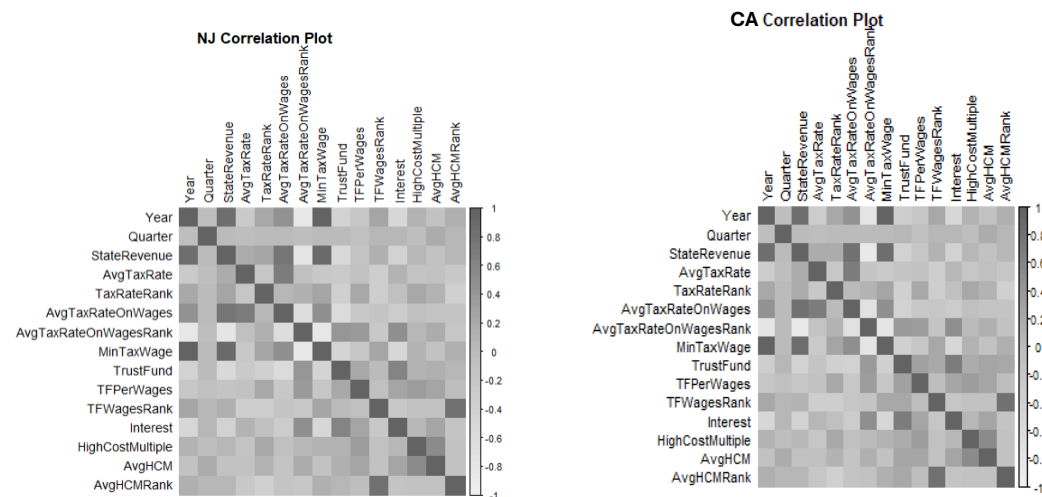


NJ scatter plots & box plots



CA scatter plots & box plots

CORRELATION PLOT:



- Correlation matrix is always symmetric.
- Correlation coefficients in the matrix range from -1 to +1.
- A value close to -1 indicates there is a negative linear relationship, +1 indicates a positive linear relationship, and 0 indicates no linear relationship.
- The value with lighter colour has the low correlation or no correlation.

Train Test Split:

```
set.seed(123)

# Define the proportion of the data you want in the training set
train_proportion <- 0.7

# Generate random indices for the training set
train_indices <- sample(1:nrow(trans_data), round(train_proportion * nrow(trans_data)))

# Create the training set
train_data <- trans_data[train_indices, ]

# Create the testing set excluding the training set
test_data <- trans_data[-train_indices, ]
```

Linear Regression models:

NJ Linear Regression Model 1:

```
Call:
lm(formula = StateRevenue ~ AvgTaxRate + TaxRateRank + AvgTaxRateOnWages +
    AvgTaxRateOnWagesRank + MinTaxWage + TrustFund + TFPerWages +
    TFWagesRank + Interest + HighCostMultiple + AvgHCM + AvgHCMRank,
    data = train_data)

Residuals:
    Min       1Q   Median       3Q      Max
-17263265 -2500361    59928   3369011  11944684

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) -1.761e+08  2.171e+07 -8.112 2.02e-10 ***
AvgTaxRate   1.263e+08  4.252e+07  2.971 0.00470 **
TaxRateRank   7.823e+06  5.585e+06  1.401 0.16800
AvgTaxRateOnWages  5.135e+07  2.902e+07  1.770 0.08344 .
AvgTaxRateOnWagesRank -8.533e+06  7.623e+06 -1.119 0.26881
MinTaxWage    4.301e+01  3.542e+00  12.143 5.98e-16 ***
TrustFund     4.102e+06  1.260e+06  3.256 0.00212 **
TFPerWages    5.674e+06  6.079e+06  0.933 0.35548
TFWagesRank   1.227e+06  3.508e+05  3.499 0.00105 **
Interest      -1.725e+06  1.777e+06 -0.971 0.33685
HighCostMultiple 2.533e+07  2.744e+07  0.923 0.36078
AvgHCM        1.920e+05  2.153e+07  0.009 0.99292
AvgHCMRank    -8.494e+04  2.598e+04 -3.269 0.00204 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 5462000 on 46 degrees of freedom
Multiple R-squared:  0.9711,    Adjusted R-squared:  0.9712
F-statistic: 163.8 on 12 and 46 DF, p-value: < 2.2e-16
```

CA Linear Regression Model 1:

```
Call:
lm(formula = StateRevenue ~ AvgTaxRate + TaxRateRank + AvgTaxRateOnWages +
    AvgTaxRateOnWagesRank + MinTaxWage + TrustFund + TFPerWages +
    TFWagesRank + Interest + HighCostMultiple + AvgHCM + AvgHCMRank,
    data = train_data)

Residuals:
    Min       1Q   Median       3Q      Max
-691976 -153509   -44083   101868   830820

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) -1.012e+06  8.158e+05 -1.240 0.220
AvgTaxRate   9.258e+05  2.540e+06  0.365 0.717
TaxRateRank   1.767e+04  1.652e+04  1.069 0.289
AvgTaxRateOnWages  5.268e+05  4.751e+05  1.109 0.272
AvgTaxRateOnWagesRank -8.319e+04  5.352e+04 -1.554 0.125
MinTaxWage    1.152e+02  4.651e+01  2.477 0.016 *
TrustFund     -4.299e-02  9.040e-02 -0.476 0.636
TFPerWages    5.525e+05  3.781e+05  1.461 0.149
TFWagesRank   1.968e+04  1.023e+04  1.924 0.059 .
Interest      1.057e+01  7.771e+00  1.360 0.179
HighCostMultiple 7.443e+05  7.596e+05  0.980 0.331
AvgHCM        -6.160e+05  4.778e+05 -1.289 0.202
AvgHCMRank    -3.043e+03  8.162e+03 -0.373 0.711
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 320200 on 61 degrees of freedom
Multiple R-squared:  0.9524,    Adjusted R-squared:  0.9431
F-statistic: 101.7 on 12 and 61 DF, p-value: < 2.2e-16
```

NJ Linear Regression Model 2:

```
Call:
lm(formula = StateRevenue ~ Year + Quarter + AvgTaxRate + TaxRateRank +
    AvgTaxRateOnWages + AvgTaxRateOnWagesRank + MinTaxWage +
    TrustFund + TFPerWages + TFWagesRank + Interest + HighCostMultiple +
    AvgHCM + AvgHCMRank, data = train_data)
```

Residuals:

Min	1Q	Median	3Q	Max
-14140544	-2764020	79801	2835234	12036727

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-3.722e+09	9.767e+08	-3.811	0.000426 ***
Year	1.813e+03	4.990e+02	3.633	0.000729 ***
Quarter	9.428e+05	6.375e+05	1.479	0.146289
AvgTaxRate	1.545e+08	3.860e+07	4.003	0.000237 ***
TaxRateRank	8.854e+06	4.988e+06	1.771	0.083416 .
AvgTaxRateOnWages	1.740e+07	2.731e+07	0.637	0.527210
AvgTaxRateOnWagesRank	-1.306e+07	6.968e+06	-1.875	0.067461 .
MinTaxWage	-7.917e+00	1.449e+01	-0.546	0.587620
TrustFund	3.832e+06	1.128e+06	3.396	0.001460 **
TFPerWages	5.756e+06	5.419e+06	1.062	0.293900
TFWagesRank	1.426e+06	3.165e+05	4.506	4.83e-05 ***
Interest	-1.074e+06	1.593e+06	-0.674	0.503782
HighCostMultiple	8.958e+06	2.590e+07	0.346	0.731079
AvgHCM	-1.243e+07	2.013e+07	-0.617	0.540218
AvgHCMRank	-9.305e+04	2.353e+04	-3.954	0.000276 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 4843000 on 44 degrees of freedom
Multiple R-squared: 0.9828, Adjusted R-squared: 0.9773
F-statistic: 179.6 on 14 and 44 DF, p-value: < 2.2e-16

CALinearLRegression Model 2:

```
Call:
lm(formula = StateRevenue ~ Year + Quarter + AvgTaxRate + TaxRateRank +
    AvgTaxRateOnWages + AvgTaxRateOnWagesRank + MinTaxWage +
    TrustFund + TFPerWages + TFWagesRank + Interest + HighCostMultiple +
    AvgHCM + AvgHCMRank, data = train_data)
```

Residuals:

Min	1Q	Median	3Q	Max
-687679	-125395	-3503	110304	668068

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-7.948e+08	1.345e+08	-5.907	1.84e-07 ***
Year	3.981e+05	6.747e+04	5.900	1.89e-07 ***
Quarter	1.036e+05	3.729e+04	2.778	0.007319 **
AvgTaxRate	1.448e+06	2.214e+06	0.654	0.515682
TaxRateRank	1.984e+04	1.346e+04	1.473	0.145944
AvgTaxRateOnWages	7.013e+05	4.145e+05	1.692	0.095969 .
AvgTaxRateOnWagesRank	1.755e+04	4.797e+04	0.366	0.715824
MinTaxWage	-3.019e+02	8.159e+01	-3.700	0.000476 ***
TrustFund	-3.616e-02	7.323e-02	-0.494	0.623309
TFPerWages	3.377e+05	3.071e+05	1.100	0.275954
TFWagesRank	1.048e+04	8.400e+03	1.248	0.216942
Interest	2.038e+00	6.431e+00	0.317	0.752392
HighCostMultiple	4.260e+05	6.194e+05	0.688	0.494305
AvgHCM	-1.085e+05	4.003e+05	-0.271	0.787408
AvgHCMRank	4.161e+03	6.802e+03	0.612	0.543117

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 258200 on 59 degrees of freedom
Multiple R-squared: 0.9701, Adjusted R-squared: 0.963
F-statistic: 136.6 on 14 and 59 DF, p-value: < 2.2e-16

NJ Linear Regression Model 3 [Backward Selection]: CA Linear Regression Model[Backward Selection]:

```
Call:
lm(formula = final_data$StateRevenue ~ Year + Quarter + AvgTaxRate +
    AvgTaxRateOnWages + AvgTaxRateOnWagesRank + TrustFund + TFPerWages +
    TFWagesRank + Interest + HighCostMultiple + AvgHCMRank, data = final_data)
```

Residuals:

Min	1Q	Median	3Q	Max
-200237	-53718	-3163	55660	213126

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-1.176e+08	4.917e+06	-23.927	< 2e-16 ***
Year	5.884e+04	2.487e+03	23.660	< 2e-16 ***
Quarter	1.482e+04	9.160e+03	1.618	0.110012
AvgTaxRate	7.944e+05	3.735e+05	2.127	0.036869 *
AvgTaxRateOnWages	3.522e+05	1.623e+05	2.169	0.033359 *
AvgTaxRateOnWagesRank	4.836e+03	2.633e+03	1.837	0.070337 .
TrustFund	2.679e-01	4.637e-02	5.777	1.80e-07 ***
TFPerWages	-5.356e+04	2.285e+04	-2.343	0.021869 *
TFWagesRank	2.529e+04	5.863e+03	4.314	5.02e-05 ***
Interest	-1.622e+01	4.535e+00	-3.577	0.000626 ***
HighCostMultiple	-5.841e+05	2.099e+05	-2.783	0.006881 **
AvgHCMRank	-2.673e+04	5.940e+03	-4.500	2.56e-05 ***

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
Call:
lm(formula = final_data$StateRevenue ~ Year + Quarter + AvgTaxRate +
    TaxRateRank + MinTaxWage + TFPerWages + TFWagesRank, data = final_data)
```

Residuals:

Min	1Q	Median	3Q	Max
-816907	-102335	-18610	109992	591803

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-6.719e+08	8.154e+07	-8.239	7.81e-13 ***
Year	3.361e+05	4.093e+04	8.212	8.93e-13 ***
Quarter	9.287e+04	2.278e+04	4.077	9.30e-05 ***
AvgTaxRate	5.049e+06	2.056e+05	24.554	< 2e-16 ***
TaxRateRank	2.234e+04	5.600e+03	3.988	0.000128 ***
MinTaxWage	-1.795e+02	4.447e+01	-4.037	0.000108 ***
TFPerWages	3.638e+05	1.790e+05	2.032	0.044809 *
TFWagesRank	1.012e+04	4.009e+03	2.524	0.013224 *

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 231900 on 98 degrees of freedom
Multiple R-squared: 0.9712, Adjusted R-squared: 0.9691
F-statistic: 471.8 on 7 and 98 DF, p-value: < 2.2e-16

NJ ARIMA MODELS:

Model 1:

```
Series: ts(final_data$StateRevenue, frequency = 4)
ARIMA(0,1,1)
```

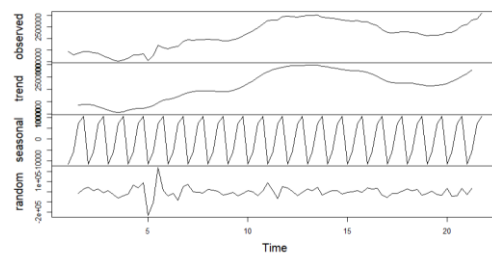
Coefficients:

	ma1
	0.3373

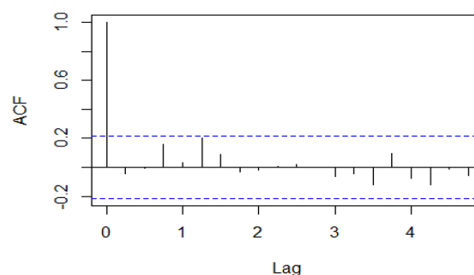
s.e. 0.1258

sigma^2 = 1.01e+10: log likelihood = -1073.33
AIC=2150.65 AICC=2150.8 BIC=2155.49

Decomposition of additive time series



Series arimamod\$residuals



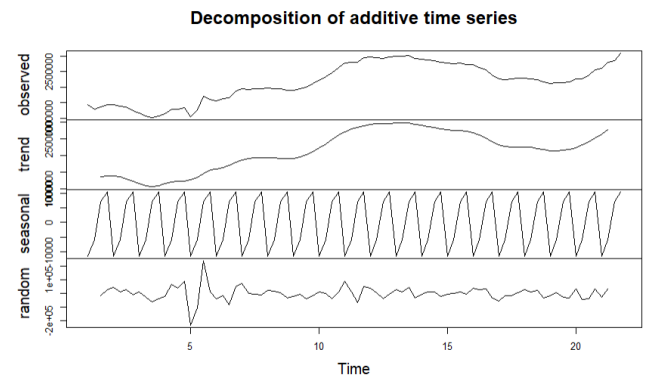
Model 2:

Series: y
Regression with ARIMA(0,1,1) errors

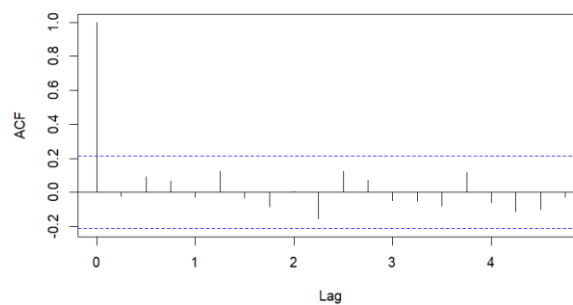
Coefficients:

	ma1	AvgTaxRate	TrustFund	TFWagesRank	Interest	HighCostMultiple
	0.3465	320693.3	0.0725	7361.567	-13.7676	-317857.0
s.e.	0.1420	262053.7	0.0431	3386.705	3.7471	163103.9

$\sigma^2 = 6.947e+09$: log likelihood = -1055.18
AIC=2124.35 AICc=2125.85 BIC=2141.28



Series arimamod2\$residuals



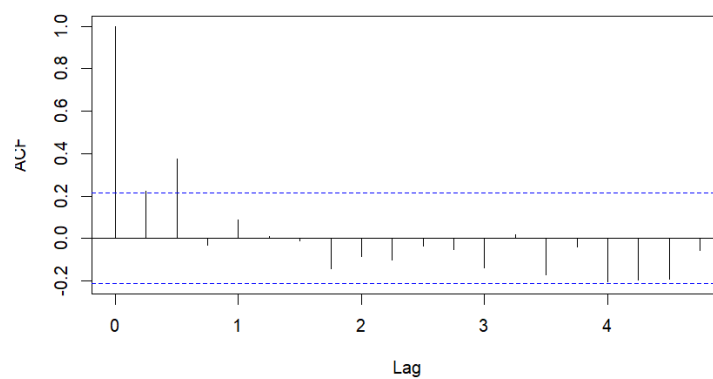
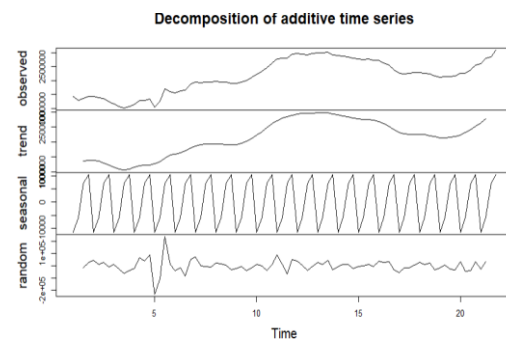
Model 3:

Series: y
Regression with ARIMA(0,0,1) errors

Coefficients:

	ma1	intercept	AvgTaxRate	Year	Quarter	Interest	HighCostMultiple
	0.5752	2152189.82	311732.90	510201.8	25208.403	-24465.26	-63062.31
s.e.	0.0782	15447.07	17711.73	15728.5	7782.489	16921.17	15655.09

$\sigma^2 = 8.881e+09$: log likelihood = -1077.84
AIC=2171.68 AICc=2173.6 BIC=2191.12



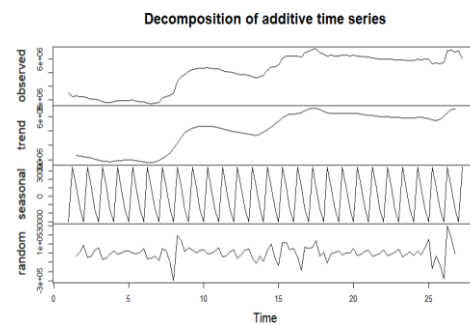
CA ARIMA MODELS:

Series: ts(final_data\$StateRevenue, frequency = 4)
ARIMA(1,1,1)(1,0,0)[4]

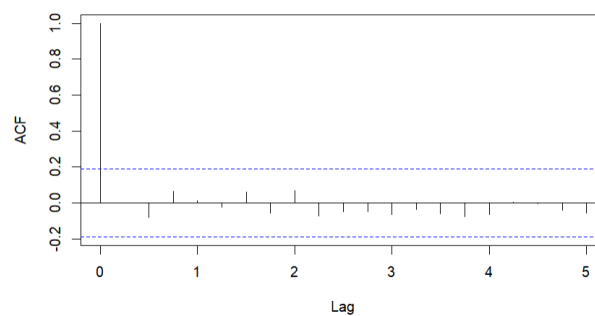
Coefficients:

	ar1	ma1	sar1
	0.7847	-0.5019	-0.2510
s.e.	0.1316	0.1788	0.1101

sigma^2 = 2.881e+10: log likelihood = -1412.06
AIC=2832.12 AICc=2832.52 BIC=2842.73



Series arimamod\$residuals



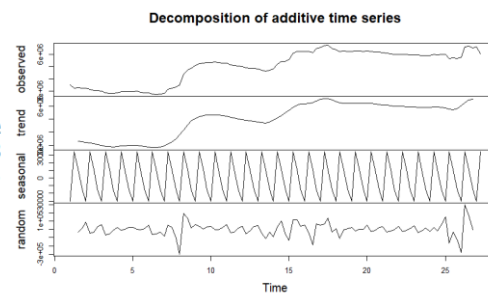
Model 2:

Series: y
Regression with ARIMA(0,1,1) errors

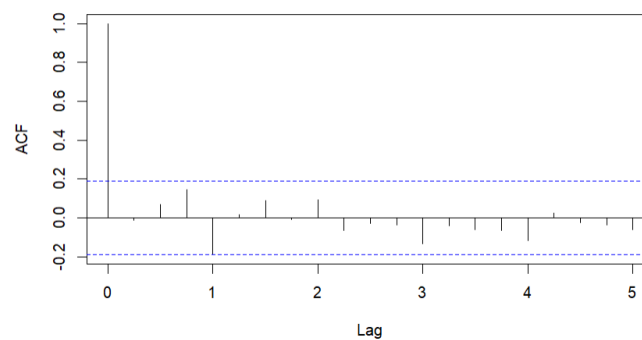
Coefficients:

	ma1	AvgTaxRate	TrustFund	TFWagesRank	Interest	HighCostMultiple
	0.2727	671762.7	0.0187	4030.341	1.5670	153214.3
s.e.	0.1424	772678.8	0.0245	6625.110	2.5258	239455.5

sigma^2 = 3.049e+10: log likelihood = -1413.32
AIC=2840.63 AICc=2841.79 BIC=2859.21



Series arimamod2\$residuals



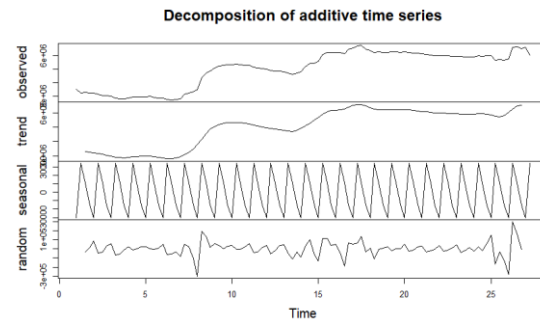
Model 3:

Series: y
Regression with ARIMA(0,0,1) errors

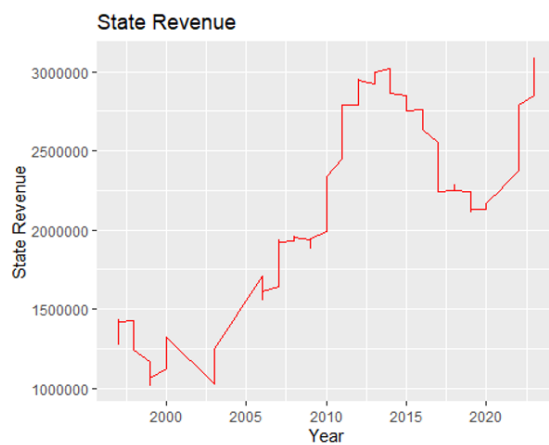
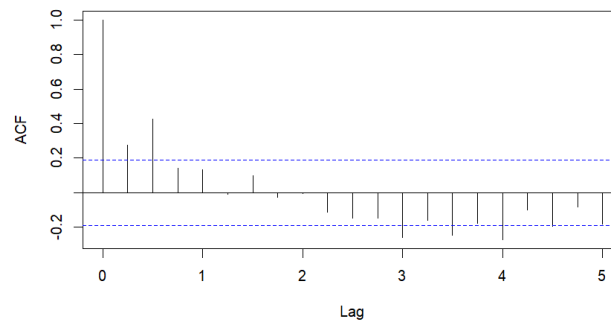
Coefficients:

	ma1	intercept	AvgTaxRate	Year	Quarter	Interest	HighCostMultiple
	0.6473	5008054.16	609922.16	1341622.59	63321.92	43601.29	31750.68
s.e.	0.0606	31190.29	32768.93	35838.69	13556.37	28104.16	19293.30

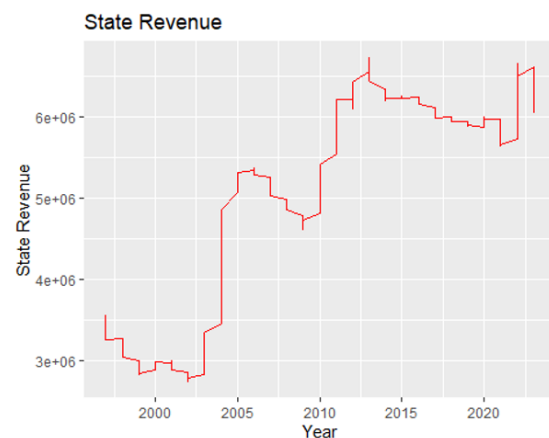
sigma^2 = 4.098e+10: log likelihood = -1442.18
AIC=2900.36 AICC=2901.84 BIC=2921.66



Series arimamod3\$residuals



NJ Revenue vs Year



CA Revenue vs Year

The graphical analysis of state revenues for New Jersey and California reveals a marked contrast in the scale and trend of fiscal growth. New Jersey's revenue trajectory, depicted in the first graph, shows a steady climb with some fluctuations, but maintains revenue figures within a 1.5-to-3-million-dollar range. California, on the other hand, presented in the second graph, demonstrates a more dramatic fiscal journey with a notable ascent, particularly post-2010, reaching heights of 6 million dollars and beyond, indicating a much larger scale of economic activity and state revenue generation.

COMPARISON BETWEEN THE MODELS OF THE TWO STATES:

NEW JERSEY MODELS	CALIFORNIA MODELS
<p>LINEAR REGRESSION MODELS:</p> <p>Model 1 did not include time variables and indicated that average tax rate, minimum taxable wages, trust fund size, and certain rankings significantly affect state revenue, with average tax rate and trust fund size having a notably positive impact.</p> <p>Model2 added the time variables Year and Quarter. It confirmed the significance of the average tax rate and trust fund size while also highlighting the importance of the time trend, with the Year variable showing a clear positive trend, indicating revenue increases annually. However, Quarter was not a significant predictor, and MinTaxWage lost its significance, which could suggest that over time and across quarters, minimum taxable wages do not consistently affect state revenue.</p> <p>ARIMA MODELS:</p> <p>Model 1 is a basic ARIMA model focusing on the time series aspect of revenue without considering external factors. It shows that there's a pattern in the past errors that can help predict future errors.</p> <p>Model 2 [ARIMA(0,1,1)] adds economic indicators to the mix, combining regression with ARIMA errors. It identifies several significant predictors of state revenue, such as average tax rate and trust fund size, while also accounting for patterns in the model's errors.</p> <p>Model 3 [ARIMA(0,0,1)] further expands the regression component to include Year and Quarter variables, showing a strong positive annual trend and a potential seasonal effect within years. This model also accounts for error patterns with an ARIMA component.</p>	<p>LINEAR REGRESSION MODELS:</p> <p>Model 1 did not include time variables and indicated that MinTaxWage (minimum taxable wages) is a significant positive predictor, indicating that as the minimum taxable wage increases, so does the state revenue.</p> <p>Model 2 added the time variables year and quarter, Year is a significant predictor, showing that over time, state revenue increases, which could capture long-term economic growth or inflation effects. Quarter was not a significant predictor in this model, suggesting that within-year seasonal effects may not be as strong. Model 2 is better than model 1</p> <p>ARIMA MODELS:</p> <p>Model 1 is a basic ARIMA model which suggests that state revenue has a strong correlation with its immediate past and displays a seasonal pattern.</p> <p>Model 2 [ARIMA(0,1,1)] is a regression model with ARIMA errors and incorporates economic indicators directly into the model. It concludes that average tax rates and trust fund metrics have significant positive effects on state revenue, with past errors influencing current predictions.</p> <p>Model 3 [ARIMA(0,0,1)] adds the Year and Quarter to the regression component of an ARIMA model with errors. It suggests an increasing trend in revenue over time and confirms the importance of average tax rates.</p>

CONCLUSION:

AIC FOR NJ MODELS:

"AIC of Linear Regression model 1 is 1524.64653112886"
 "AIC of Linear Regression model 2 is 1518.90146233524"
 "AIC of Linear Regression model 3 is 2169.90169741169"
 "AIC of Arima model 1 is 2150.65465187486"
 "AIC of Arima model 1 is 2124.35169934136"
 "AIC of Arima model 1 is 2171.67729325139"
 "The best Linear model is 2 with an AIC of 1518.90146233524"
 "The best Arima Model is Model 2 with an AIC of 2124.35169934136"

Based on the AIC values of all the models,
Model 2 is the best model among all the
linear regression models and **Model 2**
 is best among all the **ARIMA** models.

AIC FOR CALIFORNIA MODELS:

"AIC of Linear Regression model 1 is 2099.83925897627"
"AIC of Linear Regression model 2 is 2069.51568325069"
"AIC of Linear Regression model 3 is 2929.56848957018"
"AIC of Arima model 1 is 2832.11793458063"
"AIC of Arima model 1 is 2840.63263739961"
"AIC of Arima model 1 is 2900.35677876141"
"The best Linear model is 2 with an AIC of 2069.51568325069"
"The best Arima Model is Model 1 with an AIC of 2832.11793458063"

Based on the AIC values of all the models,
Model 2 is the best model among all the
linear regression models and **Model 1**
is best among all the **ARIMA** models.

The analysis shows that Linear Regression model 2 is the most effective for predicting New Jersey's state revenue and California outperforming other models with an AIC of 1518.901 and 2069.51. Research suggests that changes in top state income tax rates do lead to economic growth or employment improvements, highlighting the complex effects of tax policies on economic factors. Further, the impact of e-commerce on tax collection demonstrates the importance of considering a variety of economic activities in policymaking. Our study enhances these insights by incorporating advanced econometric techniques like ARIMA and linear regression, alongside new variables, and temporal analysis, to provide a deeper understanding of the relationship between tax policies and state revenue, suggesting that this relationship is influenced by a multitude of interacting factors. Overall, we conclude collecting more tax from the people will show positive impact on State Revenue.

The average tax rate and the trust fund size have emerged as the most influential factors across the models. The annual trend captured by the Year variable is also a consistent predictor, indicating that long-term trends are crucial in understanding and forecasting state revenue changes.

REFERENCES:

For more detailed insights, the full texts of the studies would need to be reviewed, which may require access through a subscription or academic library:

Gale, Krupkin, and Rueben's study, "The Relationship Between Taxes and Growth at the State Level: New Evidence," can be found in the National Tax Journal, vol. 68(4), pages 919-942 (IDEAS/RePEc).

Bruce, Fox, and Luna's work, "E-Tailer Sales Tax Nexus and State Tax Policies," is available in the same journal, vol. 68(3S), pages 735-766 (IDEAS/RePEc).