

## LAJC Wage Theft Data - Countplots of Claim Declined & Undetermined

October 15, 2019

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In [87]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
from IPython.core.interactiveshell import InteractiveShell
InteractiveShell.ast_node_interactivity = "all"

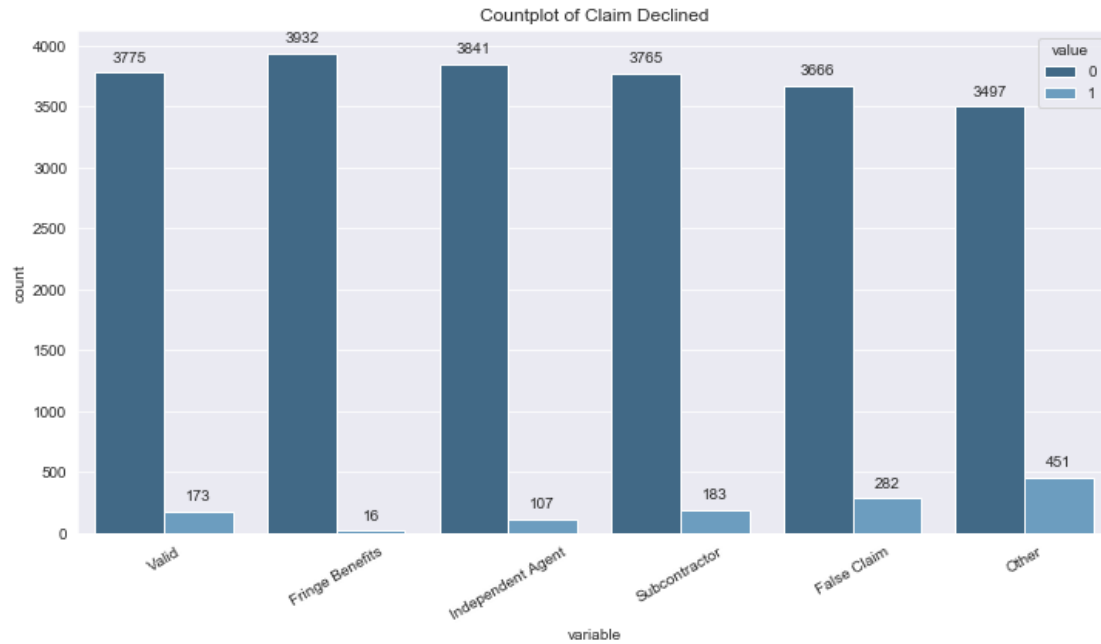
!pip install wordcloud
from PIL import Image
from wordcloud import WordCloud, STOPWORDS, ImageColorGenerator
```

```
Requirement already satisfied: wordcloud in ./anaconda3/lib/python3.7/site-packages (1.5.0)
Requirement already satisfied: pillow in ./anaconda3/lib/python3.7/site-packages (from wordcloud)
Requirement already satisfied: numpy>=1.6.1 in ./anaconda3/lib/python3.7/site-packages (from wordcloud)
```

```
In [99]: disqualified=df[['Valid', 'Fringe Benefits', 'Independent Agent', 'Subcontractor', 'F

In [121]: #Creates function for countplot
def countplot(df, name):
    fig, ax = plt.subplots(figsize=(12, 6))
    sns.set_style("darkgrid")
    sns.countplot(x="variable", hue="value", data=pd.melt(df), ax=ax, palette='Blues
    ax.set_xticklabels(ax.get_xticklabels(),rotation=30)
    for p in ax.patches:
        ax.annotate(format(p.get_height(), '.0f'), (p.get_x() + p.get_width() / 2.,

In [141]: countplot(disqualified, 'Countplot of Claim Declined')
```

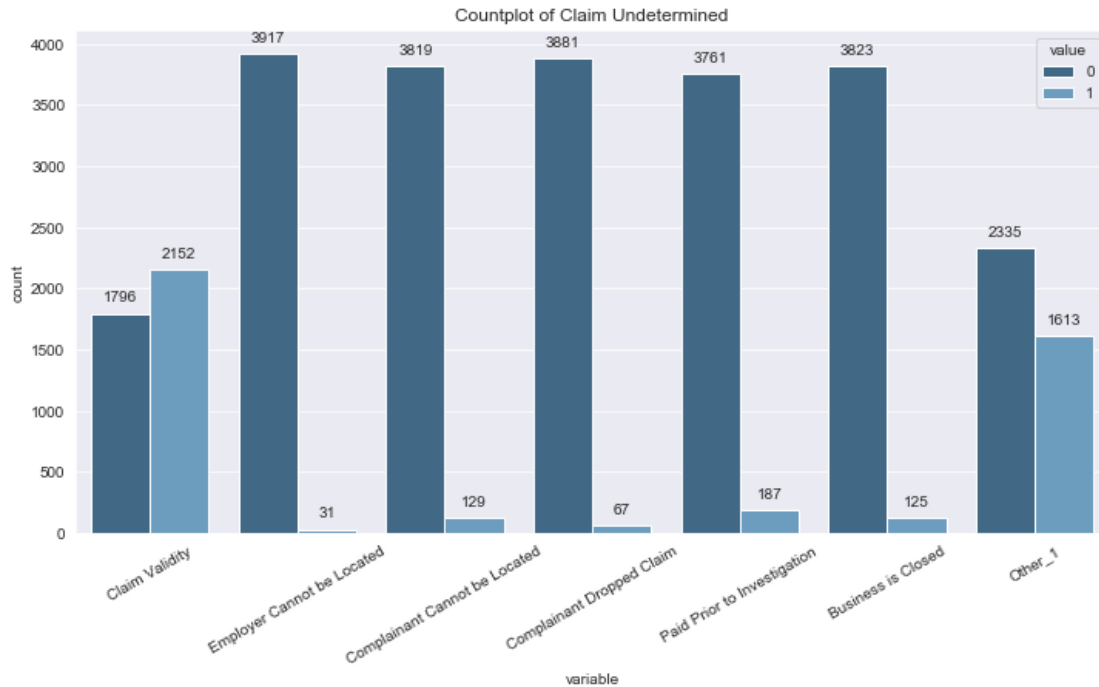


```
In [123]: #There's none for 'Employer left State'
          df['Employer left State'].unique()
```

```
Out[123]: array([0])
```

```
In [126]: undetermined=df[['Claim Validity', 'Employer Cannot be Located', 'Complainant Cannot
                           'Complainant Dropped Claim', 'Paid Prior to Investigation', 'Business'
```

```
In [127]: countplot(undetermined, 'Countplot of Claim Undetermined')
```



```
In [131]: declined_desc=df['CLAIM INVALID OTHER DESCRIPTION']
          undetermined_desc=df['CLAIM UNDETERMINED OTHER DESCRIPTION']

In [132]: declined_text = str(declined_desc)
          undetermined_text = str(undetermined_desc)

In [134]: declined_text=declined_text.replace('Name: CLAIM INVALID OTHER DESCRIPTION, Length: 39')
          undetermined_text=undetermined_text.replace('Name: CLAIM UNDETERMINED OTHER DESCRIPTION, Length: 39')

In [136]: def wordcloud_text(title, text):
          fig = plt.figure(figsize=(6, 8))
          wordcloud = WordCloud(background_color="white", collocations=False).generate(text)
          plt.imshow(wordcloud, interpolation='bilinear')
          plt.axis("off")
          plt.title(title)
          plt.show()

In [140]: wordcloud_text('Declined Other Desc', declined_text)
          wordcloud_text('Undetermined Other Desc', undetermined_text)
```

Declined Other Desc

ESTABLISH VA WORK  
RELATIONSHIP  
EMPLOYER NaN  
EMPLOYEE PERFORMED  
OUTSIDE

Undetermined Other Desc

AGREEMENT  
STATUTE DOCUMENTATION  
INSUFFICIENT NaN  
CONFLICTING  
NEITHER  
MEDICAID  
WRITTEN RECORDS  
LIMITATIONS  
EMPLOYER  
INCOMPLETE  
CLAIM  
FRAUD  
LIMIT INVESTIGATION  
CLAIMANT