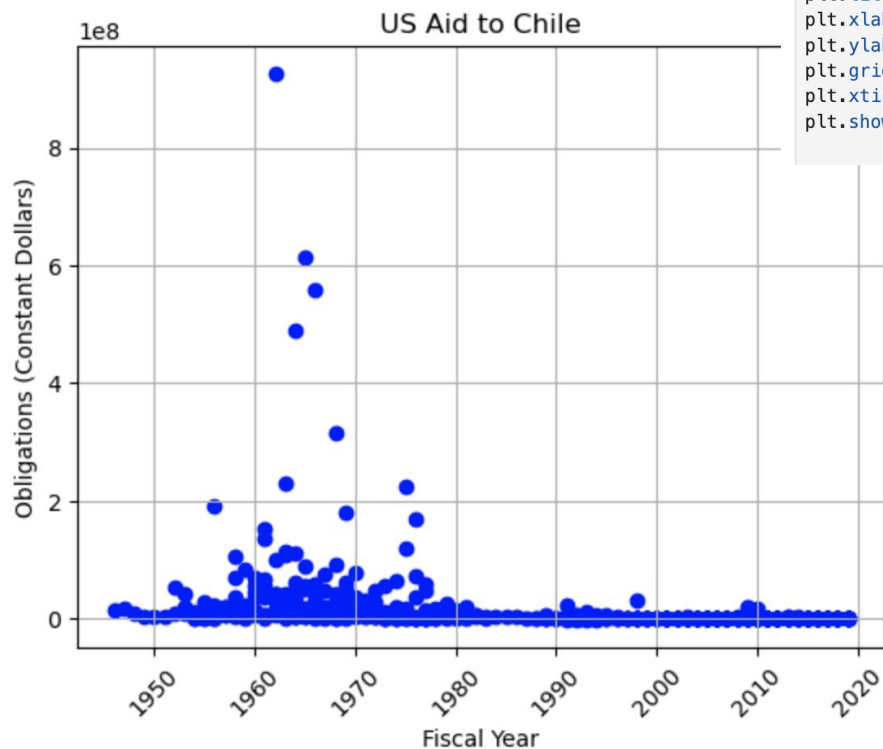


US Foreign Aid

By Lucas Larsen

Initial exploration



```
import matplotlib.pyplot as plt
```

```
plt.close("all")
```

```
ChileDF.set_index('Fiscal Year', inplace=True)
```

```
ChileDF.reset_index(inplace=True)
```

```
plt.scatter(ChileDF['Fiscal Year'], ChileDF['Obligations (Constant Dollars)'], color='blue')  
plt.title('US Aid to Chile')  
plt.xlabel('Fiscal Year')  
plt.ylabel('Obligations (Constant Dollars)')  
plt.grid(True)  
plt.xticks(rotation=45)  
plt.show()
```

```
ChileEDF['Obligations (Constant Dollars)'].quantile([0.25,0.75])
```

```
0.25    1.026128e+05
0.75    1.018619e+07
Name: Obligations (Constant Dollars), dtype: float64
```

```
ChileEDF['Obligations (Constant Dollars)'].describe()
```

```
count    3.320000e+02
mean      2.203622e+07
std       8.035404e+07
min      -1.671025e+06
25%       1.026128e+05
50%       1.286201e+06
75%       1.018619e+07
max       9.261412e+08
Name: Obligations (Constant Dollars), dtype: float64
```

```
mean_C = ChileEDF['Obligations (Constant Dollars)'].mean()
std_C = ChileEDF['Obligations (Constant Dollars)'].std()
```

```
lower_bound = mean_C - 3 * std_C
upper_bound = mean_C + 3 * std_C
```

```
FChileEDF = ChileEDF[(ChileEDF['Obligations (Constant Dollars)'] >= lower_bound) &
```

```
FChileEDF.set_index('Fiscal Year', inplace=True)
```

```
FChileEDF.reset_index(inplace=True)
```

```
plt.scatter(FChileEDF['Fiscal Year'], FChileEDF['Obligations (Constant Dollars)'], color='blue')
```

```
plt.title('US Economic Aid to Chile (no outliers)')
```

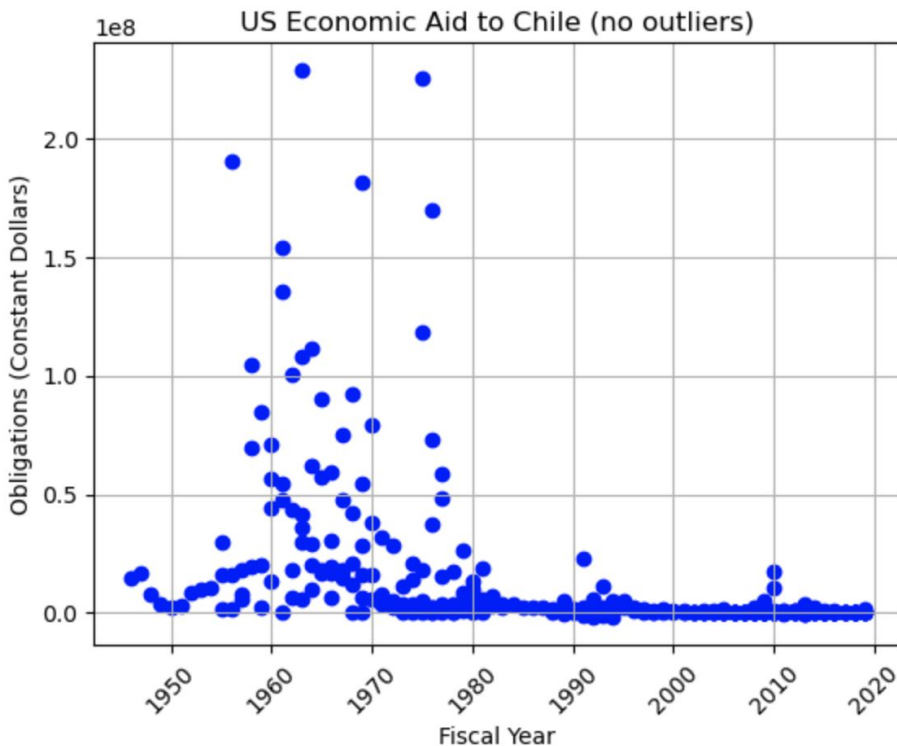
```
plt.xlabel('Fiscal Year')
```

```
plt.ylabel('Obligations (Constant Dollars)')
```

```
plt.grid(True)
```

```
plt.xticks(rotation=45)
```

```
plt.show()
```



```
CCount=USAIDF['Country'].value_counts()
```

```
CCount
```

```
Country
World (not specified)    1847
Philippines              946
Peru                     917
Guatemala                902
Thailand                  852
...
Sweden                   25
New Zealand              22
Kiribati                 22
Brunei                   15
Switzerland              14
Name: count, Length: 204, dtype: int64
```

```
MCount=USAIDF['Assistance Category'].value_counts()
MCount
```

```
Assistance Category
Economic    58221
Military    14416
Name: count, dtype: int64
```

```
Country
Philippines    251
Turkey         218
Thailand        208
World (not specified) 206
Greece         206
...
Western Europe (not specified) 2
Central America (not specified) 2
West Africa (not specified) 1
Korea, North 1
Eurasia (not specified) 1
Name: count, Length: 203, dtype: int64
```

```
EDF=USAIDF[USAIDF['Assistance Category']=='Economic']
EDFCount=EDF['Country'].value_counts()
EDFCount
```

```
Country
World (not specified)    1641
Guatemala                752
Peru                     737
Kenya                    733
Philippines              695
...
St. Lucia               12
Brunei                  10
Dominica                 10
St. Kitts and Nevis     8
Switzerland              8
Name: count, Length: 204, dtype: int64
```

```
EDF['Obligations (Constant Dollars)'].min()
```

-5402852429.842569

```
EDF['Obligations (Constant Dollars)'].max()
```

36386971527.17872

```
highestE=EDF[EDF['Obligations (Constant Dollars)']== 36386971527.17872]
```

highestE

	Fiscal Year	Region	Country	Assistance Category	Publication Row	Funding Agency	Funding Account Name	Obligations (Historical Dollars)	Obligations (Constant Dollars)
165	1947.0	Western Europe	United Kingdom	Economic	Inactive Programs	Department of the Treasury	INACTIVE - British Loan	3.750000e+09	3.638697e+10

```
MDF['Obligations (Constant Dollars)'].max()
```

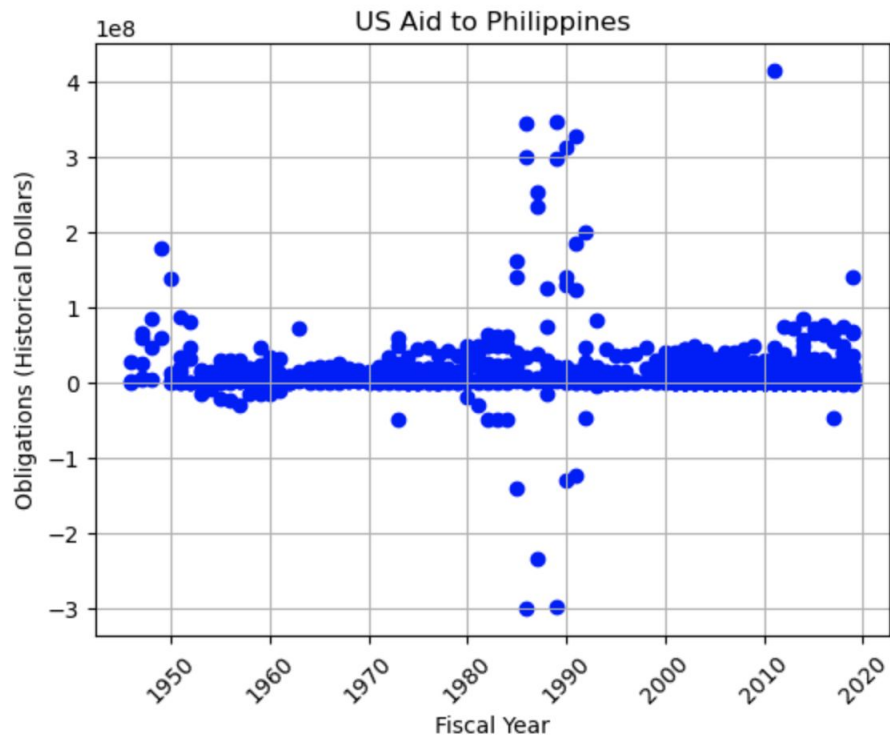
14860350190.008175

```
highestM=MDF[MDF['Obligations (Constant Dollars)']== 14860350190.008175]
```

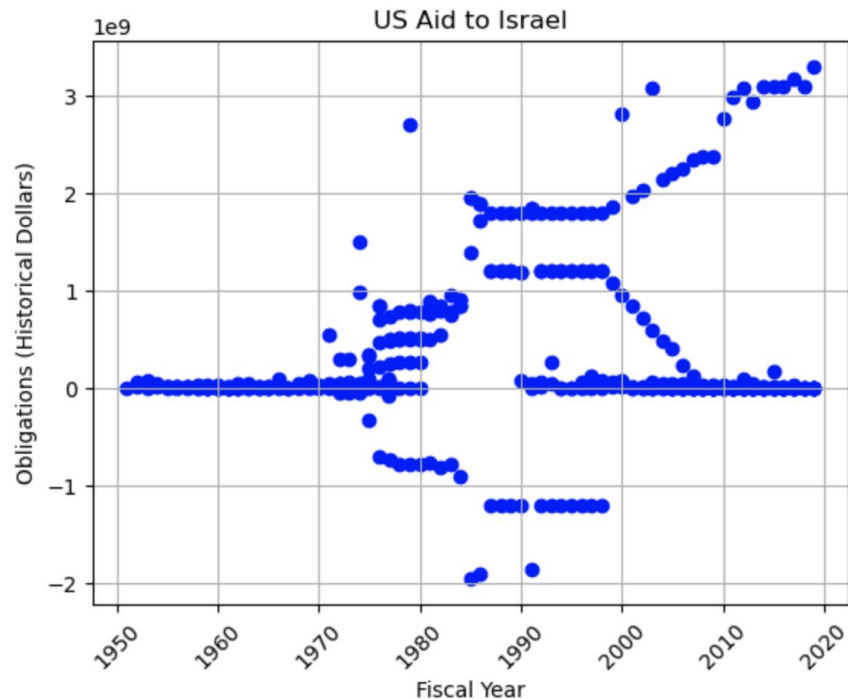
highestM

	Fiscal Year	Region	Country	Assistance Category	Publication Row	Funding Agency	Funding Account Name	Obligations (Historical Dollars)	Obligations (Constant Dollars)
9987	1973.0	Asia	Vietnam	Military	Other Military Assistance	Unknown - Historical Greenbook	INACTIVE - MASF Grants	3.226834e+09	1.486035e+10

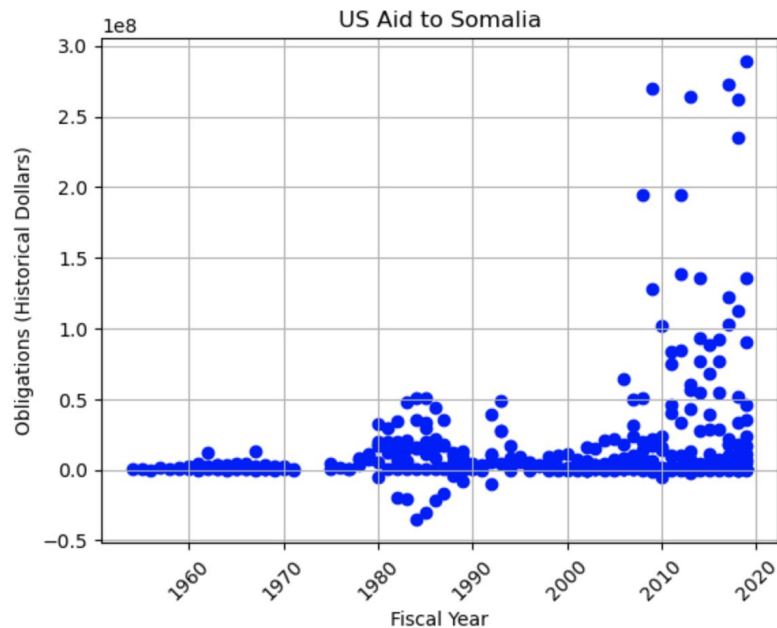
```
plt.scatter(PhDF['Fiscal Year'], PhDF['Obligations (Historical Dollars)'], color='blue')
plt.title('US Aid to Philippines')
plt.xlabel('Fiscal Year')
plt.ylabel('Obligations (Historical Dollars)')
plt.grid(True)
plt.xticks(rotation=45)
plt.show()
```



```
IsDF = USAIDF[(USAIDF['Country'] == 'Israel')]
plt.scatter(IsDF['Fiscal Year'], IsDF['Obligations (Historical Dollars)'], color='blue')
plt.title('US Aid to Israel')
plt.xlabel('Fiscal Year')
plt.ylabel('Obligations (Historical Dollars)')
plt.grid(True)
plt.xticks(rotation=45)
plt.show()
```



```
SoDF = USAIDF[(USAIDF['Country'] == 'Somalia')]
plt.scatter(SoDF['Fiscal Year'], SoDF['Obligations (Historical Dollars)'], color='blue')
plt.title('US Aid to Somalia')
plt.xlabel('Fiscal Year')
plt.ylabel('Obligations (Historical Dollars)')
plt.grid(True)
plt.xticks(rotation=45)
plt.show()
```



```
MEDF=USAIDF[USAIDF['Region']=='Middle East and North Africa']
MEDFCount=MEDF['Country'].value_counts()
MEDFCount
```

Country	
Jordan	746
Morocco	674
Egypt	666
Tunisia	526
Lebanon	508
Iraq	456
Yemen	436
Israel	402
Middle East & North Africa (not specified)	363
West Bank/Gaza	245
Algeria	233
Libya	220
Oman	215
Iran	207
Syria	182
Saudi Arabia	122
Bahrain	122
United Arab Emirates	65
Kuwait	35
Qatar	32
Name: count, dtype: int64	

```
MEEDF=EDF[EDF['Region']== 'Middle East and North Africa']
MEEDFCount=MEEDF['Country'].value_counts()
MEEDFCount
```

```
Country
Jordan      545
Egypt       539
Morocco     500
Lebanon     378
Yemen       366
Iraq        360
Middle East & North Africa (not specified)  345
Tunisia     343
Israel      292
West Bank/Gaza  239
Algeria     182
Syria       171
Libya       169
Iran        135
Oman        127
Saudi Arabia   62
United Arab Emirates  55
Bahrain      51
Kuwait       31
Qatar        28
Name: count, dtype: int64
```

```
MEMDF=MDF[MDF['Region']== 'Middle East and North Africa']
MEMDFCount=MEMDF['Country'].value_counts()
MEMDFCount
```

```
Country
Jordan      201
Tunisia     183
Morocco     174
Lebanon     130
Egypt       127
Israel      110
Iraq        96
Oman        88
Iran        72
Bahrain     71
Yemen       70
Saudi Arabia  60
Libya       51
Algeria     51
Middle East & North Africa (not specified)  18
Syria       11
United Arab Emirates  10
West Bank/Gaza   6
Kuwait         4
Qatar          4
Name: count, dtype: int64
```

```
Country
Israel      98
Jordan      84
Morocco     82
Philippines 80
Turkey      78
..
Singapore   2
Germany     2
Central America (not specified)  2
Equatorial Guinea  1
New Zealand  1
Name: count, Length: 166, dtype: int64
```

```
FMFPDF=USAIDF[USAIDF['Funding Account Name'].isin(['Foreign Military Financing Program','Foreign Military Financing
FMFPDF['Country'].value_counts()
```



```
FMFPDFgrouped = FMFPDF.groupby('Country')['Obligations (Historical Dollars)'].sum().reset_index()
FMFPDFgrouped
```

	Country	Obligations (Historical Dollars)
0	Afghanistan	1.118922e+09
1	Albania	9.025864e+07
2	Angola	2.950000e+06
3	Antigua and Barbuda	1.278800e+07
4	Argentina	2.405349e+08
...
161	Vietnam	1.193578e+09
162	World (not specified)	1.407172e+09
163	Yemen	1.807460e+08
164	Zambia	1.250000e+06
165	Zimbabwe	2.240000e+06

166 rows x 2 columns

```
FMFPDFgrouped.sort_values('Obligations (Historical Dollars)', ascending=False)
```

	Country	Obligations (Historical Dollars)
75	Israel	9.985807e+10
48	Egypt	4.828408e+10
153	Turkey	8.968293e+09
79	Jordan	7.575280e+09
62	Greece	7.166607e+09
...
53	Eswatini	6.389272e+05
88	Lesotho	5.700562e+05
29	Central African Republic	3.700000e+05
36	Congo (Brazzaville)	3.530000e+05
50	Equatorial Guinea	3.190000e+05

166 rows x 2 columns



```
MDFgrouped=MDF.groupby('Country')['Obligations (Constant Dollars)'].sum().reset_index()
MDFgrouped.sort_values('Obligations (Constant Dollars)', ascending=False)
```

	Country	Obligations (Constant Dollars)
89	Israel	1.720461e+11
0	Afghanistan	9.144610e+10
195	Vietnam	8.540254e+10
58	Egypt	7.523967e+10
185	Turkey	4.632681e+10
...
198	Western Europe (not specified)	1.103259e+05
49	Cyprus	9.034160e+04
174	Sweden	5.640337e+04
88	Ireland	5.521934e+04
97	Korea, North	8.169007e+03

203 rows x 2 columns

Conclusion

- In past research I have done for other classes, analyzing this relationship between U.S. foreign aid and specific countries would be highly useful.
 - For example, the relationship between the US and Israel, which clearly shows a consistent, high-dollar commitment by the US to Israel, especially in terms of direct foreign military aid.
- Visualizing the U.S. role in different historical matters would be useful for other research.
 - For example, seeing the impact of certain world events, like the end of the Marcos dictatorship in the Philippines, the start of the 2011 Famine in Somalia, the role the US had in rebuilding Europe after WWII, or the role it had in the invasion of Afghanistan and Vietnam.
- I will use this to guide my future research, especially when it pertains to US intervention.

Sources

- <https://www.usaid.gov/developer/greenbookapi>
- <https://www.britannica.com/place/Philippines/Martial-law>
- <https://www.dec.org.uk/appeal/east-africa-crisis-appeal-2011#:~:text=In%202011%20the%20worst%20droughts,urgent%20need%20of%20humanitarian%20assistance>.