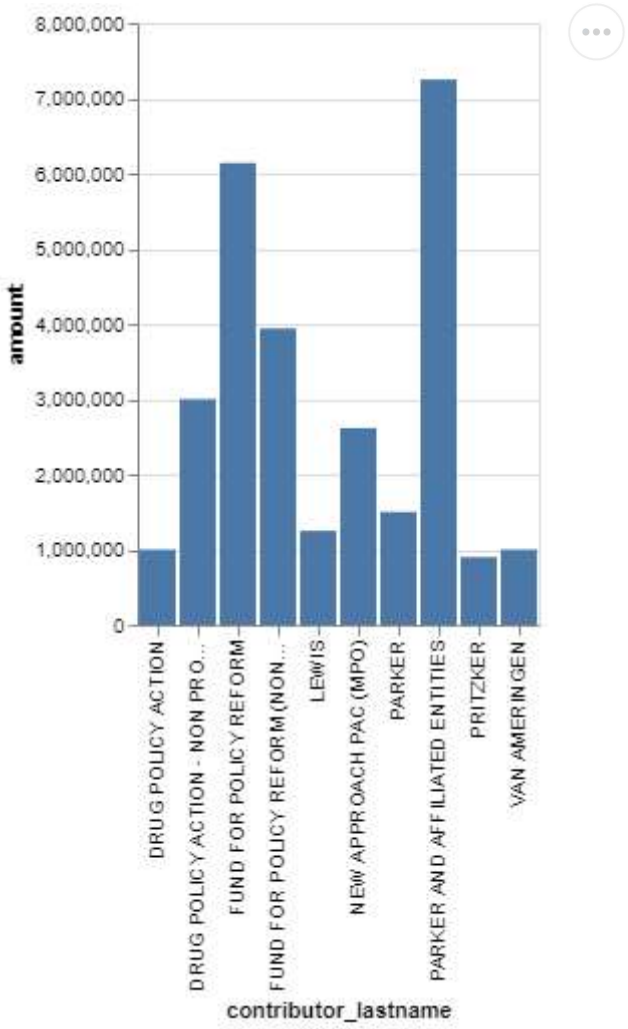
In [317]:

```
alt.Chart(top_supporters).mark_bar().encode(x="contributor_lastname", y="amount")
```

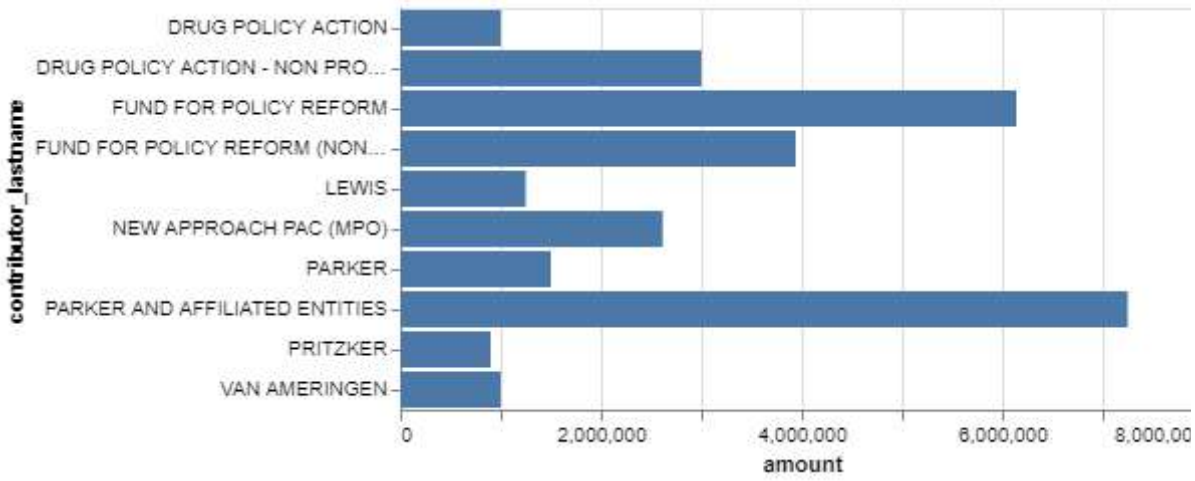
Out[317]:



In [318]:

```
#transposing the bars
alt.Chart(top_supporters).mark_bar().encode(
    x="amount",
    y="contributor_lastname")
```

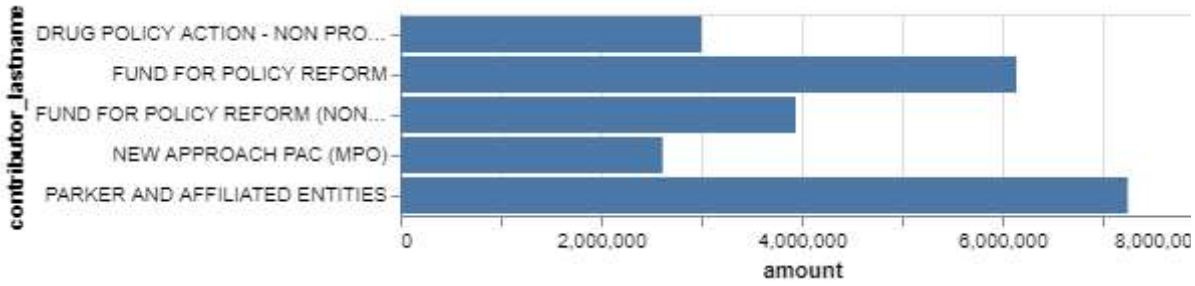
Out[318]:



In [319]:

```
#top 5 records
alt.Chart(top_supporters.head(5)).mark_bar().encode(
    x="amount",
    y="contributor_lastname")
```

Out[319]:



In [320]:

```
#combine 2 columns (the first and last name) putting them together in a new field on the df
```

In [321]:

```
top_supporters["contributor_fullname"] = top_supporters["contributor_firstname"] + top_supp
top_supporters.head()
```

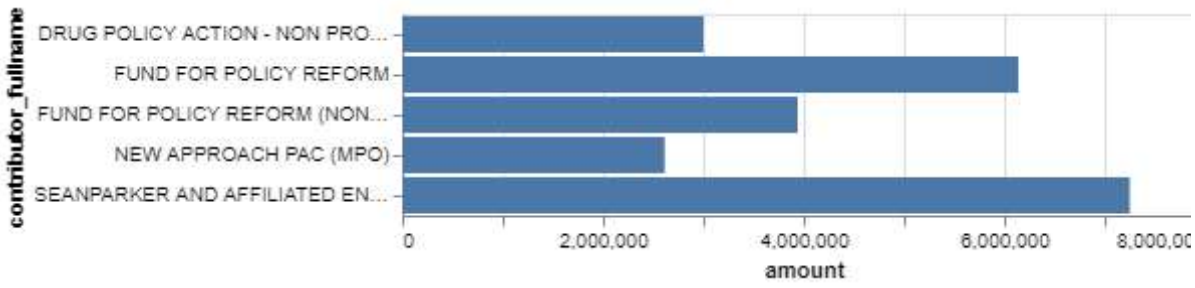
Out[321]:

	contributor_firstname	contributor_lastname	amount	contributor_fullname
487	SEAN	PARKER AND AFFILIATED ENTITIES	7250000.0	SEANPARKER AND AFFILIATED ENTITIES
19		FUND FOR POLICY REFORM	6140000.0	FUND FOR POLICY REFORM
20		FUND FOR POLICY REFORM (NONPROFIT 501 (C)(4))	3940000.0	FUND FOR POLICY REFORM (NONPROFIT 501 (C)(4))
12		DRUG POLICY ACTION - NON PROFIT 501C4, YES ON ...	3000000.0	DRUG POLICY ACTION - NON PROFIT 501C4, YES ON ...
31		NEW APPROACH PAC (MPO)	2615000.0	NEW APPROACH PAC (MPO)

In [322]:

```
alt.Chart(top_supporters.head(5)).mark_bar().encode(
    x="amount",
    y="contributor_fullname")
```

Out[322]:



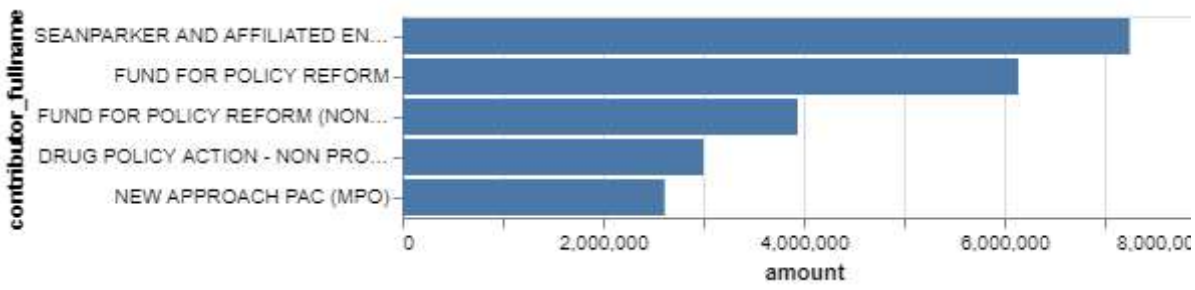
In [323]:

```
#This chart is sorted alphabetically by y-axis value but we want to
#sort the y-axis values by their corresponding x values
```

In [324]:

```
alt.Chart(top_supporters.head(5)).mark_bar().encode(
    x="amount",
    y=alt.Y("contributor_fullname", sort="-x"))
```

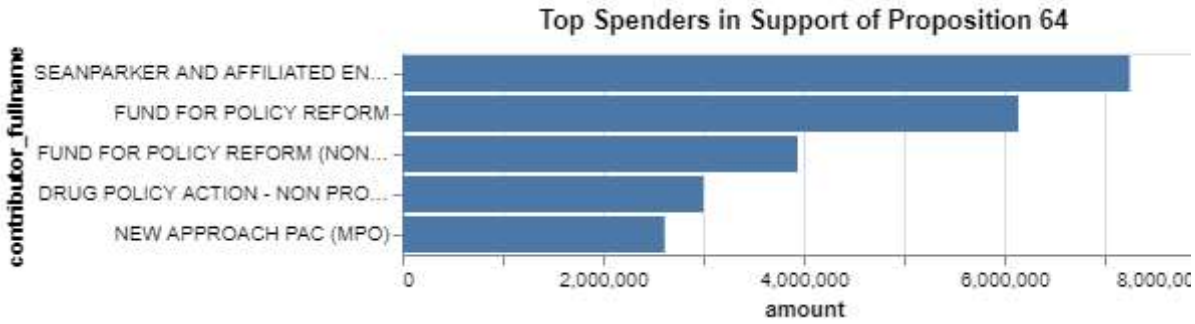
Out[324]:



In [325]:

```
#adding a title to the chart
alt.Chart(top_supporters.head(5)).mark_bar().encode(
    x="amount",
    y=alt.Y("contributor_fullname", sort="-x")).properties(title="Top Spenders in Support o
```

Out[325]:



In [326]:

```
#checking who spent money on both sides (supporting AND opposing) by creating new dataframe
#summing up the top contributors in our whole merged dataframe
```

In [327]:

```
top_contributors = merged.fillna("").groupby(
    ["contributor_firstname", "contributor_lastname","committee_position"]).amount.sum().re
top_contributors.head(10)
```

Out[327]:

	contributor_firstname	contributor_lastname	committee_position	amount
554	SEAN	PARKER AND AFFILIATED ENTITIES	SUPPORT	7250000.0
31		FUND FOR POLICY REFORM	SUPPORT	6140000.0
32		FUND FOR POLICY REFORM (NONPROFIT 501 (C)(4))	SUPPORT	3940000.0
24		DRUG POLICY ACTION - NON PROFIT 501C4, YES ON ...	SUPPORT	3000000.0
49		NEW APPROACH PAC (MPO)	SUPPORT	2615000.0
553	SEAN	PARKER	SUPPORT	1500000.0
352	JULIE	SCHAUER	OPPOSE	1364000.0
179	DANIEL	LEWIS	SUPPORT	1250000.0
23		DRUG POLICY ACTION	SUPPORT	1000000.0
265	HENRY	VAN AMERINGEN	SUPPORT	1000000.0

In [328]:

```
#adding top_contributor_fullname column
top_contributors["contributor_fullname"] = top_contributors["contributor_firstname"] + top_
top_contributors.head(10)
```

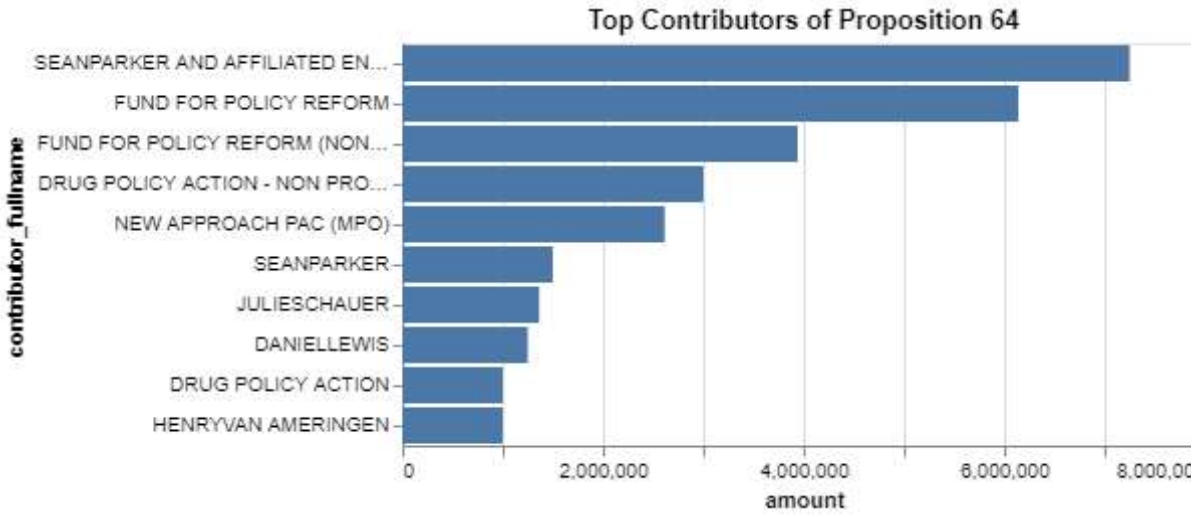
Out[328]:

	contributor_firstname	contributor_lastname	committee_position	amount	contributor_fulll
554	SEAN	PARKER AND AFFILIATED ENTITIES	SUPPORT	7250000.0	SEANPARKER AFFILI/ ENT
31		FUND FOR POLICY REFORM	SUPPORT	6140000.0	FUND FOR PC REF
32		FUND FOR POLICY REFORM (NONPROFIT 501 (C) (4))	SUPPORT	3940000.0	FUND FOR PC REF (NONPROFIT 5(
24		DRUG POLICY ACTION - NON PROFIT 501C4, YES ON ...	SUPPORT	3000000.0	DRUG PC ACTION - PROFIT 501C4, (
49		NEW APPROACH PAC (MPO)	SUPPORT	2615000.0	NEW APPRC PAC (I
553	SEAN	PARKER	SUPPORT	1500000.0	SEANPAI
352	JULIE	SCHAUER	OPPOSE	1364000.0	JULIESCH/
179	DANIEL	LEWIS	SUPPORT	1250000.0	DANIELLI
23		DRUG POLICY ACTION	SUPPORT	1000000.0	DRUG PC AC
265	HENRY	VAN AMERINGEN	SUPPORT	1000000.0	HENR' AMERIN

In [329]:

```
alt.Chart(top_contributors.head(10)).mark_bar().encode(
    x="amount",
    y=alt.Y("contributor_fullname", sort="-x")).properties(title="Top Contributors of Propo
```

Out[329]:



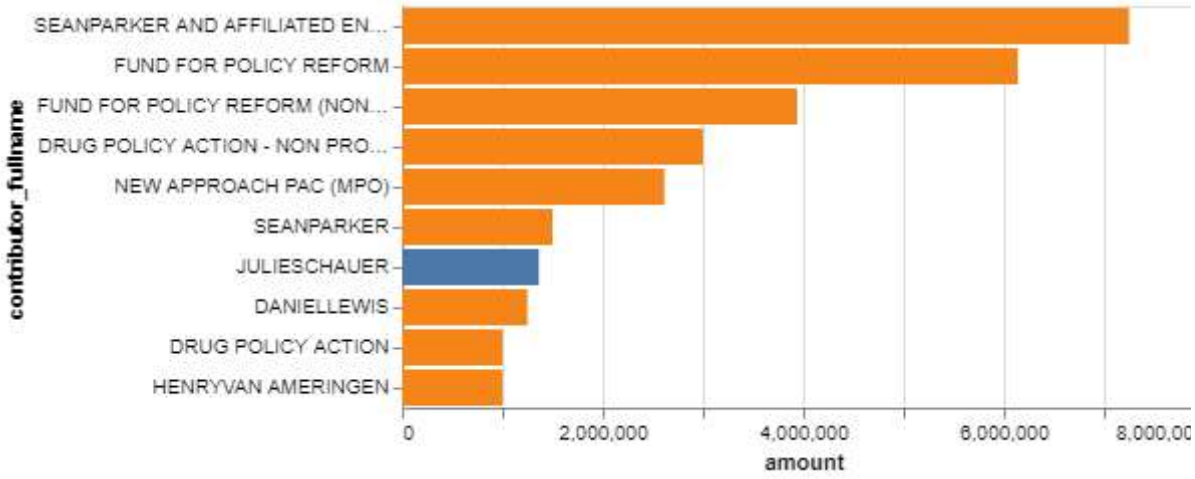
In [330]:

```
#adding color to show committee position (support or oppose)
```

In [331]:

```
alt.Chart(top_contributors.head(10)).mark_bar().encode(
    x="amount",
    y=alt.Y("contributor_fullname",sort="-x"),
    color="committee_position")
```

Out[331]:



In [332]:

```
#to export this data into a spreadsheet:
#top_supporters.head(10).to_csv("top_supporters.csv")
```

In [ ]:

```

```

In [ ]:

```

```