In [1]:
```
import math
import sqlalchemy
import psycopg2
from sqlalchemy import create_engine
import re
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from sqlalchemy.types import String, Integer
```

In [2]:
```
engine = create_engine('postgresql://admin:secret@as7_db:5432/Names')
```

In [3]:
```
df = pd.read_sql_table("Full",engine)
```

In [4]:
```
totals = df.groupby(["Sex","Name"]).sum()
```

In [5]:
```
male, female = totals.loc["M"], totals.loc["F"]
```

In [6]:
```
ratio = (male / female).dropna()
```

In [7]:
```
unisex = ratio[(ratio > 0.5) & (ratio < 2.0)].dropna().index
```

In [8]:
```
top = (male.loc[unisex] + female.loc[unisex]).sort_values(by = ["Count"], ascending =
```

In [9]:
```
df_indexed = df.set_index(["Sex","Name", "Year"]).sort_index()
```

In [10]:
```
df_indexed
```

Out[10]:

			Count
Sex	**Name**	**Year**	
F	**Aabha**	**2011**	7
		2012	5
		2014	9
		2015	7
		2016	7
...	**...**	**...**	...
M	**Zyvion**	**2009**	5
	Zyvon	**2015**	7
	Zyyon	**2014**	6
	Zzyzx	**2010**	5
		2018	5

1957046 rows × 1 columns

In [11]:
```
plt.figure(figsize = (10,10))
for i, name in enumerate(top.index):
    plt.subplot(5,2,i+1)
    plt.plot(df_indexed.loc["M",name], label = "M")
    plt.plot(df_indexed.loc["F",name], label = "F")

    plt.legend()
    plt.title(name)

plt.tight_layout()
```