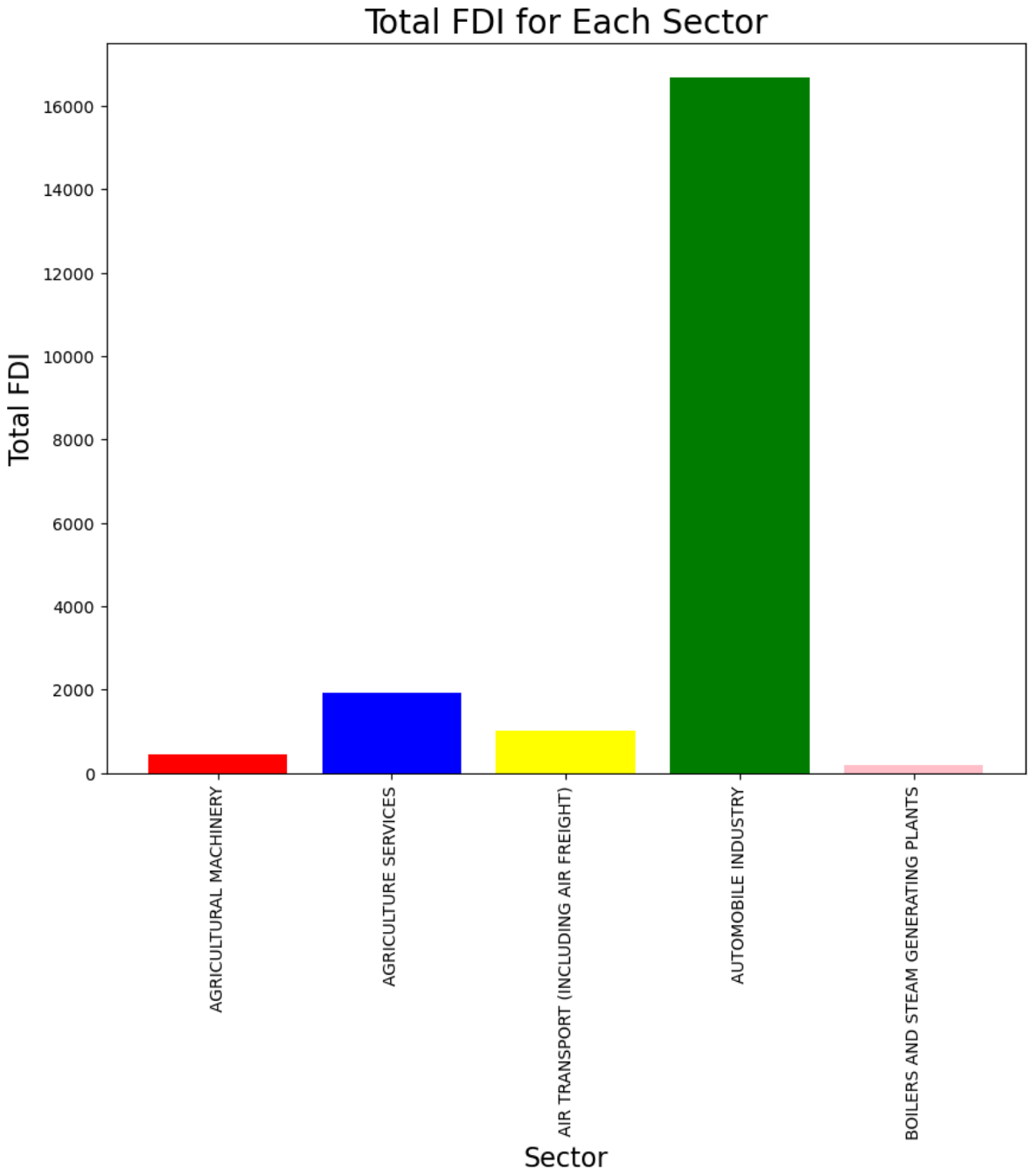
In [1]:
```
import pandas as pd
from matplotlib import pyplot as plt
data = pd.read_csv("P5 FDI data.csv")
year_columns=['2000-2001','2001-2002','2002-2003','2003-2004','2004-2005','2005-2006'
data['Total_FDI'] = data[year_columns].sum(axis=1)
totalfdi=data.groupby('Sector')['Total_FDI'].sum().reset_index()
print(totalfdi)
sector=totalfdi.head(5)
label=sector['Sector']
value=sector['Total_FDI']
fig=plt.subplots(figsize=(10,8))
plt.title("Total FDI for Each Sector",fontsize=20)
plt.xlabel("Sector",fontsize=16)
plt.xticks(rotation=90)
plt.ylabel("Total FDI", fontsize=16)
plt.bar(label,value,label="Total FDI for Each Sector",color=('red','blue','yellow','g
plt.show()
```

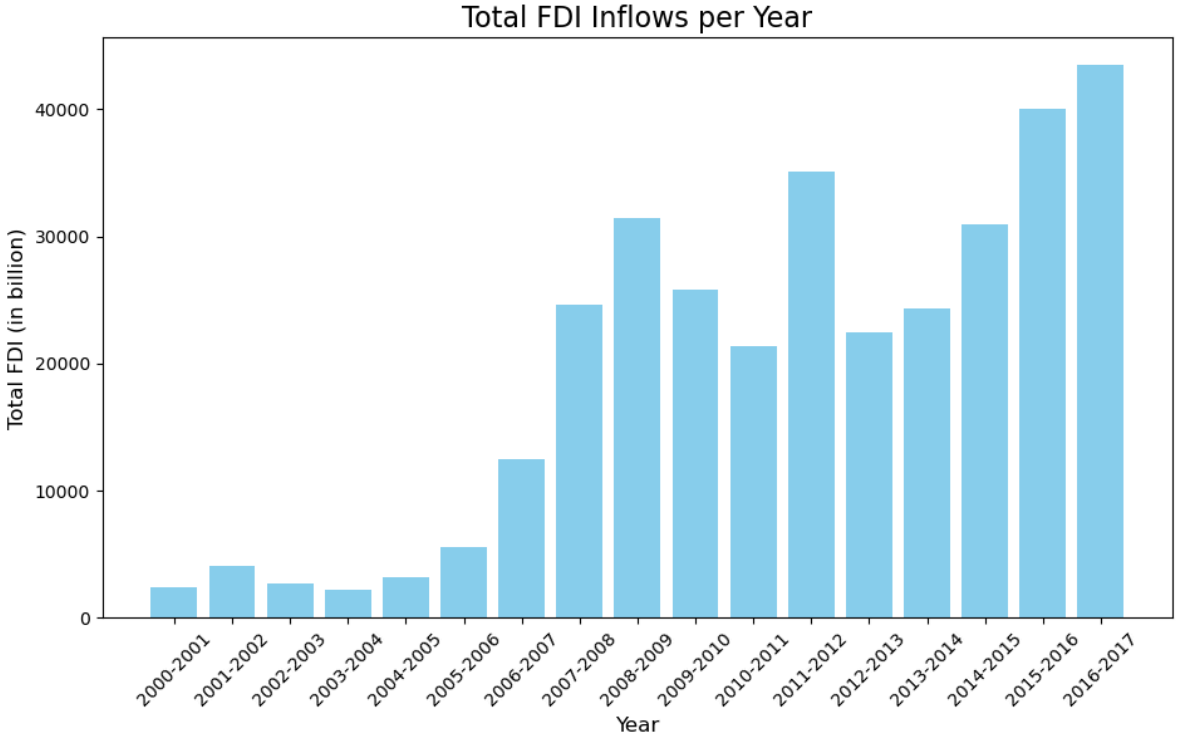
```
                                  Sector  Total_FDI
0                  AGRICULTURAL MACHINERY     449.20
1                    AGRICULTURE SERVICES    1920.75
2   AIR TRANSPORT (INCLUDING AIR FREIGHT)    1014.44
3                     AUTOMOBILE INDUSTRY   16673.92
4     BOILERS AND STEAM GENERATING PLANTS     195.15
..                                    ...        ...
58                    TELECOMMUNICATIONS   23946.01
59      TEXTILES (INCLUDING DYED,PRINTED)    2471.41
60                        TIMBER PRODUCTS     157.68
61                                TRADING   14210.88
62           VEGETABLE OILS AND VANASPATI     697.50

[63 rows x 2 columns]
```



In [ ]:
```
Summary: Highlights which sectors received the most FDI, with the telecommunications
```

In [2]:
```
total_fdi_per_year = data[year_columns].sum()
print(total_fdi_per_year)
plt.figure(figsize=(11, 6))
plt.bar(year_columns,total_fdi_per_year, color='skyblue')
plt.title('Total FDI Inflows per Year', fontsize=16)
plt.xlabel('Year', fontsize=12)
plt.ylabel('Total FDI (in billion)', fontsize=12)
plt.xticks(rotation=45)
plt.show()
```

```
2000-2001     2378.71
2001-2002     4027.69
2002-2003     2704.32
2003-2004     2187.85
2004-2005     3218.69
2005-2006     5539.75
2006-2007    12491.76
2007-2008    24575.40
2008-2009    31395.96
2009-2010    25834.38
2010-2011    21383.07
2011-2012    35120.78
2012-2013    22423.59
2013-2014    24299.32
2014-2015    30930.47
2015-2016    40000.99
2016-2017    43478.26
dtype: float64
```



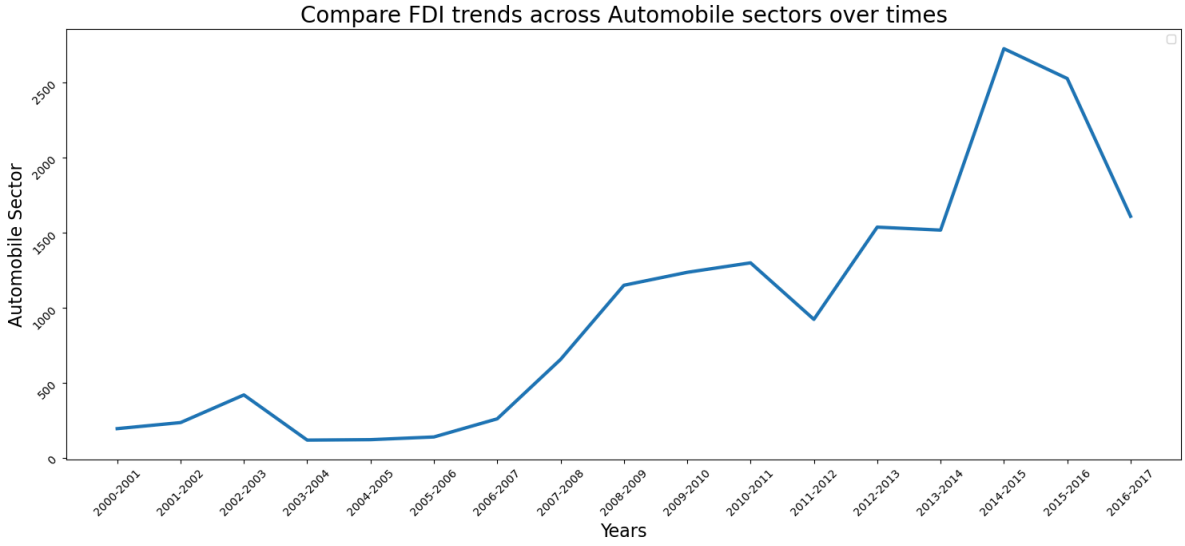
In [ ]:
```
Summary:Shows how FDI inflows have surged, especially after 2005, indicating economic
```

In [3]:
```
automobile_data = data[data['Sector'] == 'AUTOMOBILE INDUSTRY']
year_columns = ['2000-2001', '2001-2002', '2002-2003', '2003-2004',
                '2004-2005', '2005-2006', '2006-2007', '2007-2008',
                '2008-2009', '2009-2010', '2010-2011', '2011-2012',
                '2012-2013', '2013-2014', '2014-2015', '2015-2016',
                '2016-2017']
automobile_data_long = pd.melt(automobile_data, id_vars='Sector', value_vars=year_col
                               var_name='Year', value_name='FDI')
print(automobile_data_long)
label=automobile_data_long["FDI"]
value=automobile_data_long["Year"]
fig=plt.subplots(figsize=(18,7))
plt.title("Compare FDI trends across Automobile sectors over times",fontsize=20)
plt.plot(value, label,linewidth=3.0)
plt.xlabel("Years",fontsize=16)
plt.yticks(rotation=45)
plt.xticks(rotation=45)
plt.ylabel("Automobile Sector",fontsize=16)
```

```
plt.legend()
plt.show()
```

```
No artists with labels found to put in legend.  Note that artists whose label start wi
th an underscore are ignored when legend() is called with no argument.
```

	Sector	Year	FDI
0	AUTOMOBILE INDUSTRY	2000-2001	195.33
1	AUTOMOBILE INDUSTRY	2001-2002	235.76
2	AUTOMOBILE INDUSTRY	2002-2003	419.96
3	AUTOMOBILE INDUSTRY	2003-2004	119.09
4	AUTOMOBILE INDUSTRY	2004-2005	121.97
5	AUTOMOBILE INDUSTRY	2005-2006	139.93
6	AUTOMOBILE INDUSTRY	2006-2007	260.72
7	AUTOMOBILE INDUSTRY	2007-2008	656.10
8	AUTOMOBILE INDUSTRY	2008-2009	1150.03
9	AUTOMOBILE INDUSTRY	2009-2010	1236.29
10	AUTOMOBILE INDUSTRY	2010-2011	1299.41
11	AUTOMOBILE INDUSTRY	2011-2012	922.99
12	AUTOMOBILE INDUSTRY	2012-2013	1537.28
13	AUTOMOBILE INDUSTRY	2013-2014	1517.28
14	AUTOMOBILE INDUSTRY	2014-2015	2725.64
15	AUTOMOBILE INDUSTRY	2015-2016	2526.82
16	AUTOMOBILE INDUSTRY	2016-2017	1609.32



In [ ]:
```
Summary:This chart highlights the growth trajectory in the automobile industry and ho
```

In [ ]:
```
```