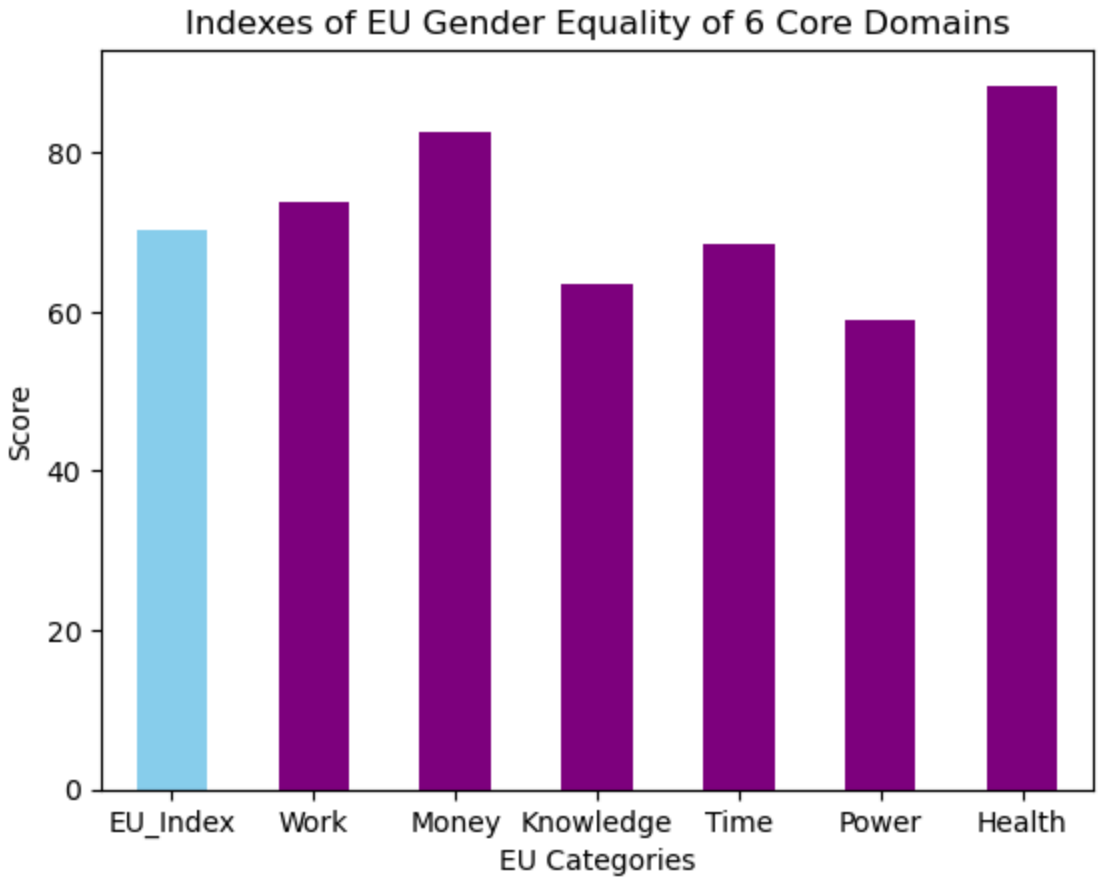
In [2]:
```
#Import necessary libraries
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

#Create a dataframe of Gender Equality Index scores in 2023 from eige.europe.eu
data = {"EU": ["EU_Index","Work", "Money", "Knowledge","Time", "Power", "Health",],
        "Score": [70.2, 73.8, 82.6, 63.6, 68.5, 59.1, 88.5]}
df = pd.DataFrame(data)
print(df)
#Set a Figure Size in order to prevent squeezed charts
plt.figure(figsize=(10, 6))

# Set EU_Index bar has a different color than others.
colors = ["SkyBlue" if category == "EU_Index" else "Purple" for category in df["EU"]]

#create a BarPlot for visualize the scores
df.plot(kind="bar", x="EU", y="Score", color=colors, legend=False)
plt.title("Indexes of EU Gender Equality of 6 Core Domains")
plt.xlabel("EU Categories")
plt.ylabel("Score")
plt.xticks(rotation=0)
plt.savefig("chart1111.png", dpi=300)
plt.show()
```

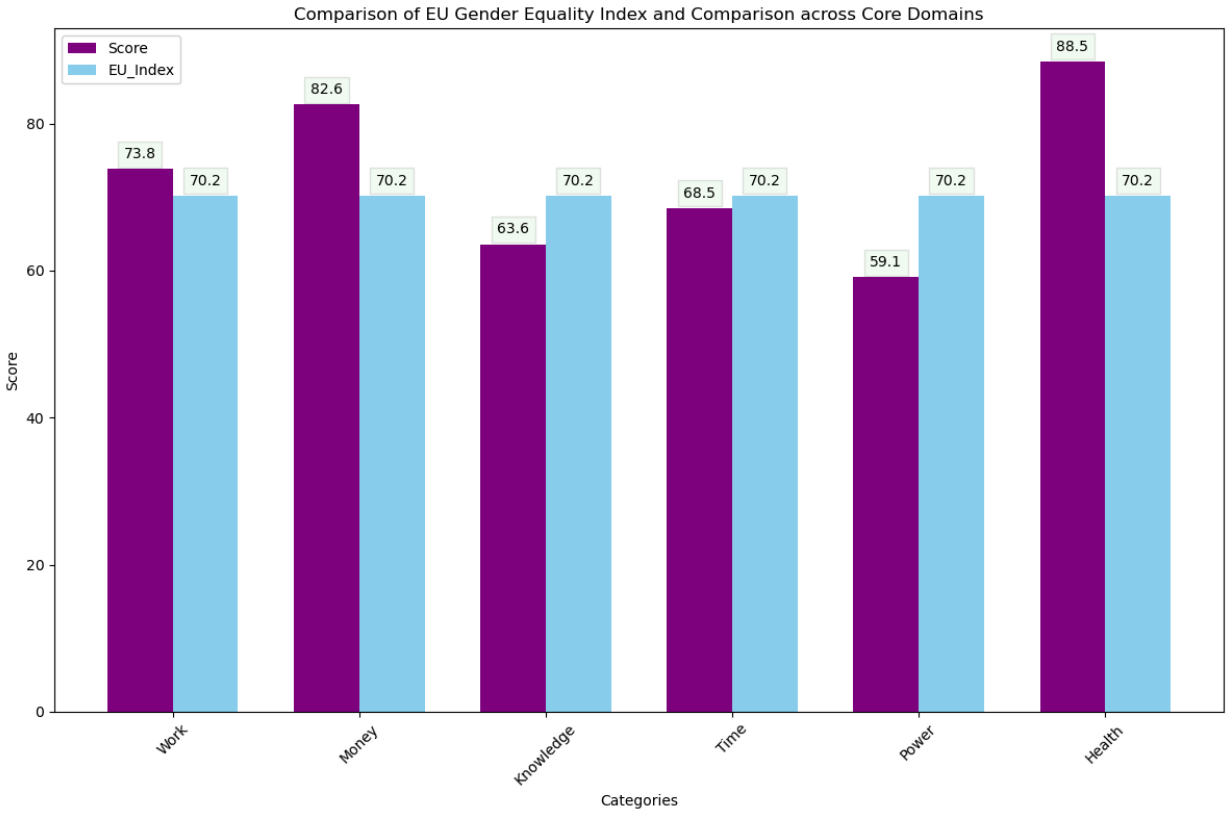
```
          EU  Score
0   EU_Index   70.2
1       Work   73.8
2      Money   82.6
3  Knowledge   63.6
4       Time   68.5
5      Power   59.1
6     Health   88.5
<Figure size 1000x600 with 0 Axes>
```



In [117…

```
#To compare scores and Average EU_Index scores, create a new Column that contains EU_I
data2 = {
    "Categories": ["Work", "Money", "Knowledge", "Time", "Power", "Health"],
    "Index": [73.8, 82.6, 63.6, 68.5, 59.1, 88.5],
    "EU": [70.2, 70.2, 70.2, 70.2, 70.2, 70.2]
}

df2 = pd.DataFrame(data2)

#Set a Figure Size in order to prevent squeezed charts
plt.figure(figsize=(12, 8))

# Set the position of the bars
bar_width = 0.35
index_positions = np.arange(len(df2))
comparison_positions = index_positions + bar_width

# Plot the index bars
plt.bar(index_positions, df2["Index"], bar_width, color="Purple", label="Score")

# Plot the comparison bars next to the index bars
plt.bar(comparison_positions, df2["EU"], bar_width, color="SkyBlue", label="EU_Index")

plt.title("Comparison of EU Gender Equality Index and Comparison across Core Domains")
plt.xlabel("Categories")
plt.ylabel("Score")
plt.xticks(index_positions + bar_width / 2, df2["Categories"], rotation=45)
plt.legend()

# Add values on top of the bars with a box around them
for i, index in enumerate(df2["Index"]):
```

```
    plt.text(i, index + 1, f'{index:.1f}', ha='center', va='bottom', bbox=dict(facecol

for i, eu_index in enumerate(df2["EU"]):
    plt.text(i + bar_width, eu_index + 1, f'{eu_index:.1f}', ha='center', va='bottom',

plt.tight_layout()
plt.savefig("chart2.png", dpi=800)
plt.show()
```



In [85]:
```
df2.to_csv('EU_GENDER_INDEX.csv', index=False)
```

In [81]:
```
import os
current_directory = os.getcwd()
print("Current Working Directory:", current_directory)
```

```
Current Working Directory: C:\Users\serca
```

In [ ]:
```

```