

Euro 2024 Analysis: Shooting Accuracy and Goal Conversion Rates

I'm excited to share an analysis of shooting accuracy and goal conversion rates for top teams in the Euro! This analysis reveals which teams are the most efficient in converting their chances into goals.

Project Code and Analysis

Here is the complete code for the analysis, including the data preparation, calculations, and visualizations.

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt

# Simulated match statistics data including shots on target
match_stats_data = {
    'Team': ['Germany', 'France', 'Spain', 'Italy', 'Portugal'],
    'Shots': [50, 60, 45, 55, 65],
    'Shots on Target': [20, 25, 18, 22, 24],
    'Goals': [12, 15, 10, 14, 16]
}

match_stats_df = pd.DataFrame(match_stats_data)

# Calculate shooting accuracy and conversion rate
match_stats_df['Shooting Accuracy (%)'] = (match_stats_df['Shots on
Target'] / match_stats_df['Shots']) * 100
```

```
match_stats_df['Goal Conversion Rate (%)'] = (match_stats_df['Goals'] /  
match_stats_df['Shots on Target']) * 100
```

```
# Plotting the shooting accuracy and goal conversion rate
```

```
fig, axs = plt.subplots(2, 1, figsize=(12, 12))
```

```
# Shooting Accuracy
```

```
axs[0].barh(match_stats_df['Team'], match_stats_df['Shooting Accuracy  
(%)'], color='skyblue')
```

```
axs[0].set_xlabel('Shooting Accuracy (%)')
```

```
axs[0].set_title('Shooting Accuracy of Teams in the Euro')
```

```
plt.tight_layout()
```

```
plt.savefig('shooting_accuracy.png')
```

```
# Goal Conversion Rate
```

```
axs[1].barh(match_stats_df['Team'], match_stats_df['Goal Conversion Rate  
(%)'], color='green')
```

```
axs[1].set_xlabel('Goal Conversion Rate (%)')
```

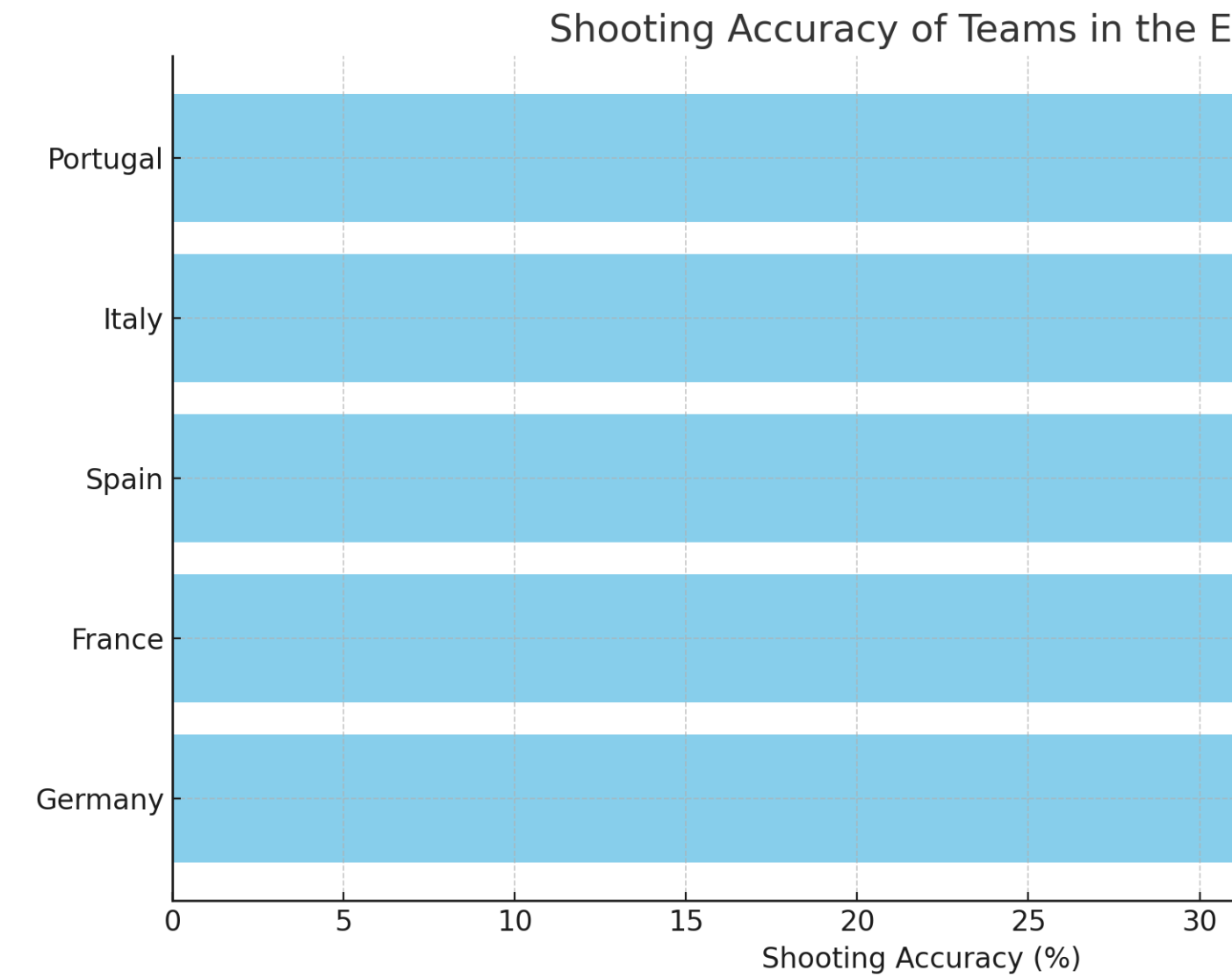
```
axs[1].set_title('Goal Conversion Rate of Teams in the Euro')
```

```
plt.tight_layout()
```

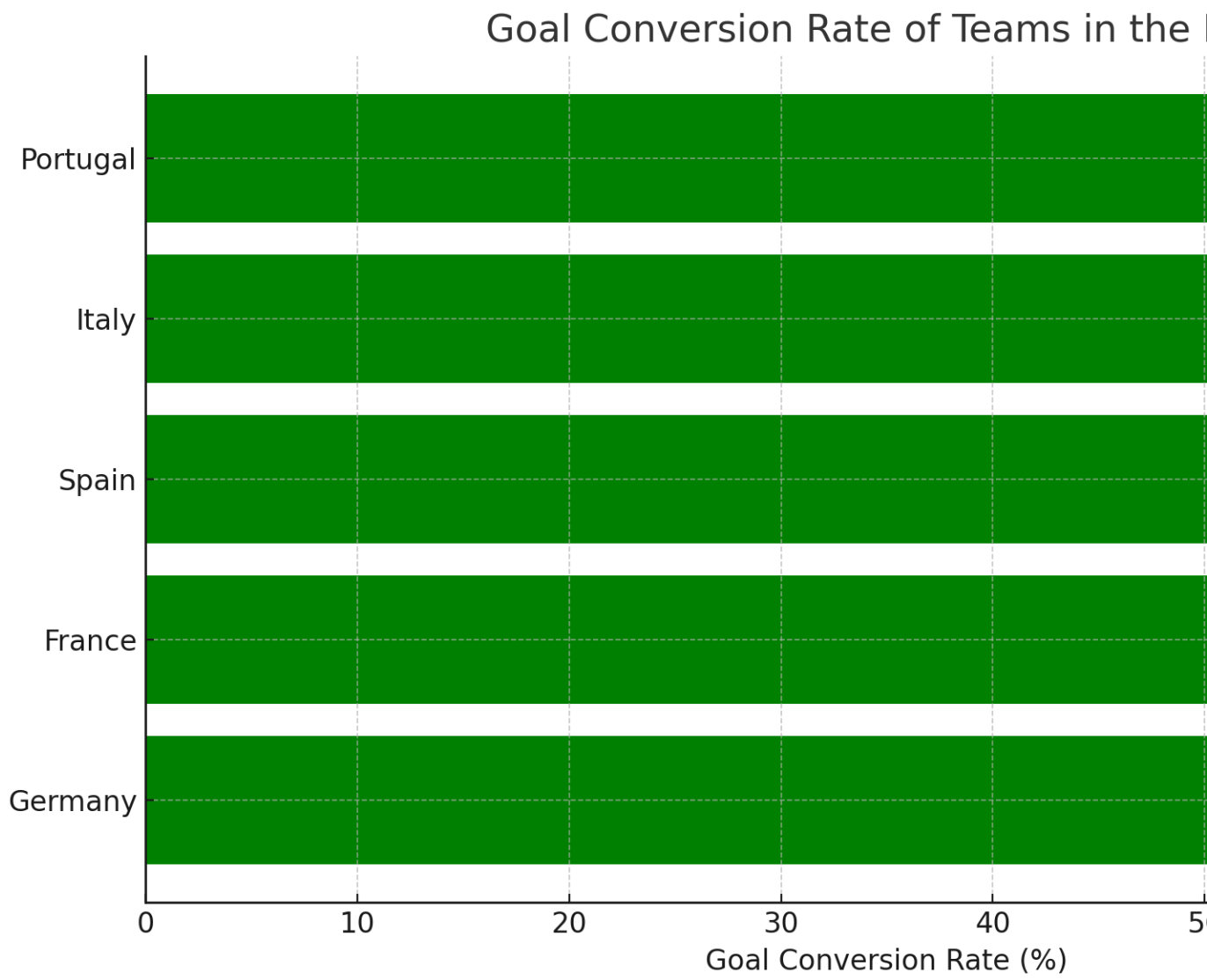
```
plt.savefig('goal_conversion_rate.png')
```

```
plt.close()
```

```
### Shooting Accuracy of Teams in the Euro
```



Goal Conversion Rate of Teams in the Euro



These insights highlight the teams that not only create chances but also convert them effectively. Understanding these metrics can provide a deeper appreciation of team performances. Feel free to share your thoughts and predictions for Euro 2024!