

ESG in the EMEA Region

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Topic Overview

Examining EMEA companies amidst a rising ESG focus



Country

Regulations can affect ESG

- How does ESG vary by country?
- How does the government influence ESG?



Time

ESG focus has changed rapidly

- How does this affect data?
- Has ESG observance really improved?

Topic

Dataset

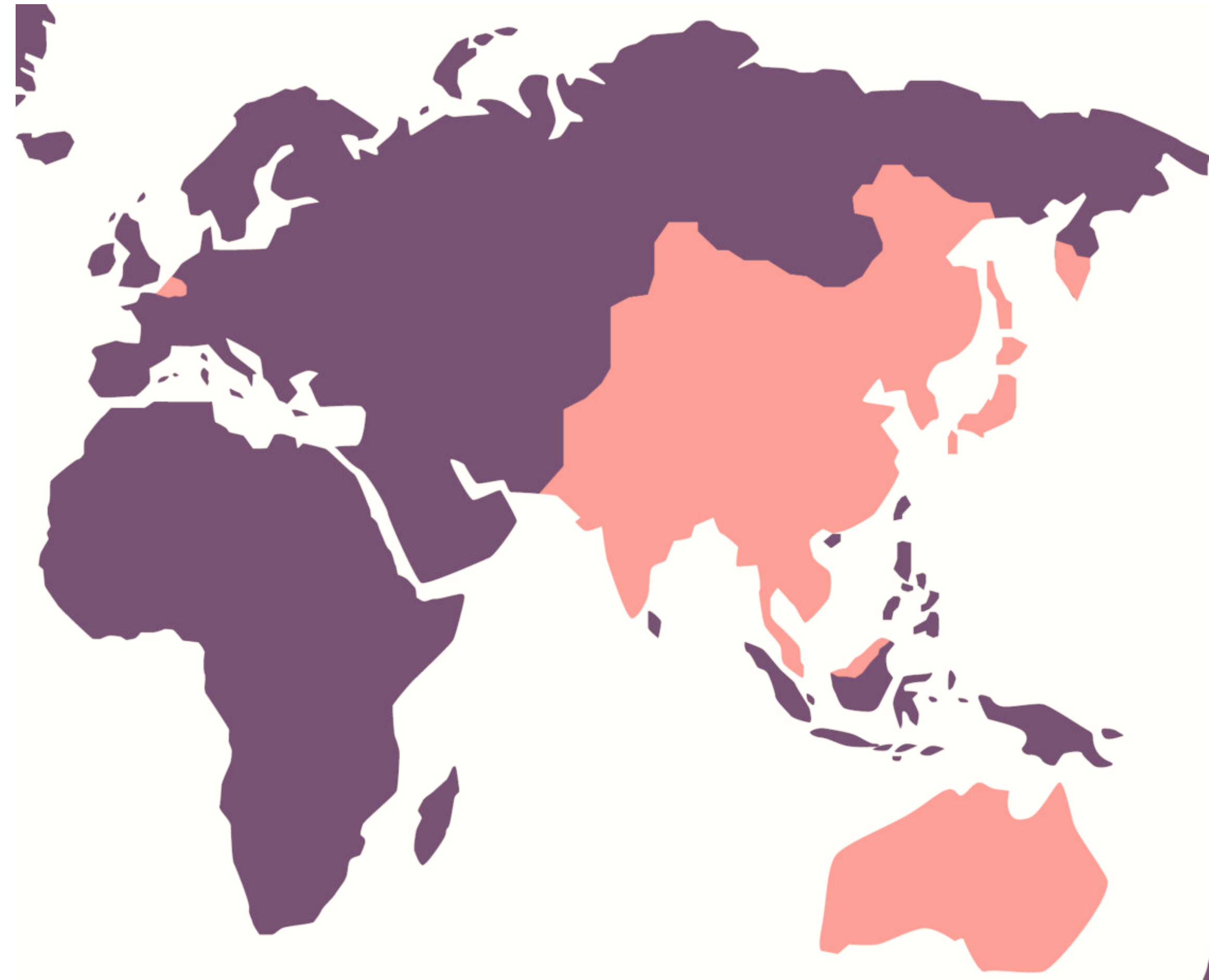
Exploration

Limitations

Insights

Dataset Overview

A large ESG-focused dataset published on Mendeley Data



1618 Rows x 66 Columns

Dataset Background

- Published in May 2022 on Mendeley Data
- Dataset intended for econometric analysis
- Focuses on ESG changes in emerging markets

Topic

Dataset

Exploration

Limitations

Insights

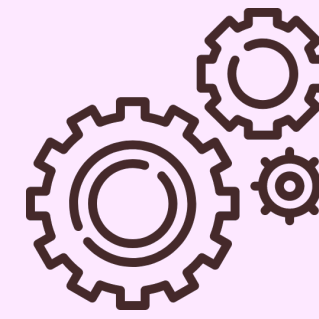
Dataset Overview

The dataset contains both qualitative and quantitative data



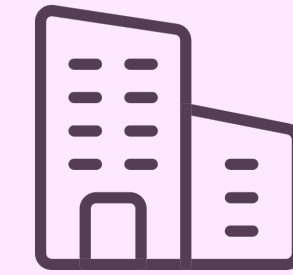
Country

Saudi Arabia, South Africa,
United Arab Emirates



Industry

Consumer Staples, Energy,
Health Care



Company

Enerjisa Enerji, Exxaro
Resources Ltd.



Disclosure

ESG, Environment, Social,
Governance



Performance

ESG, Environment, Social,
Governance



Government

GDP, Regulatory Quality,
Corruption

Topic

Dataset

Exploration

Limitations

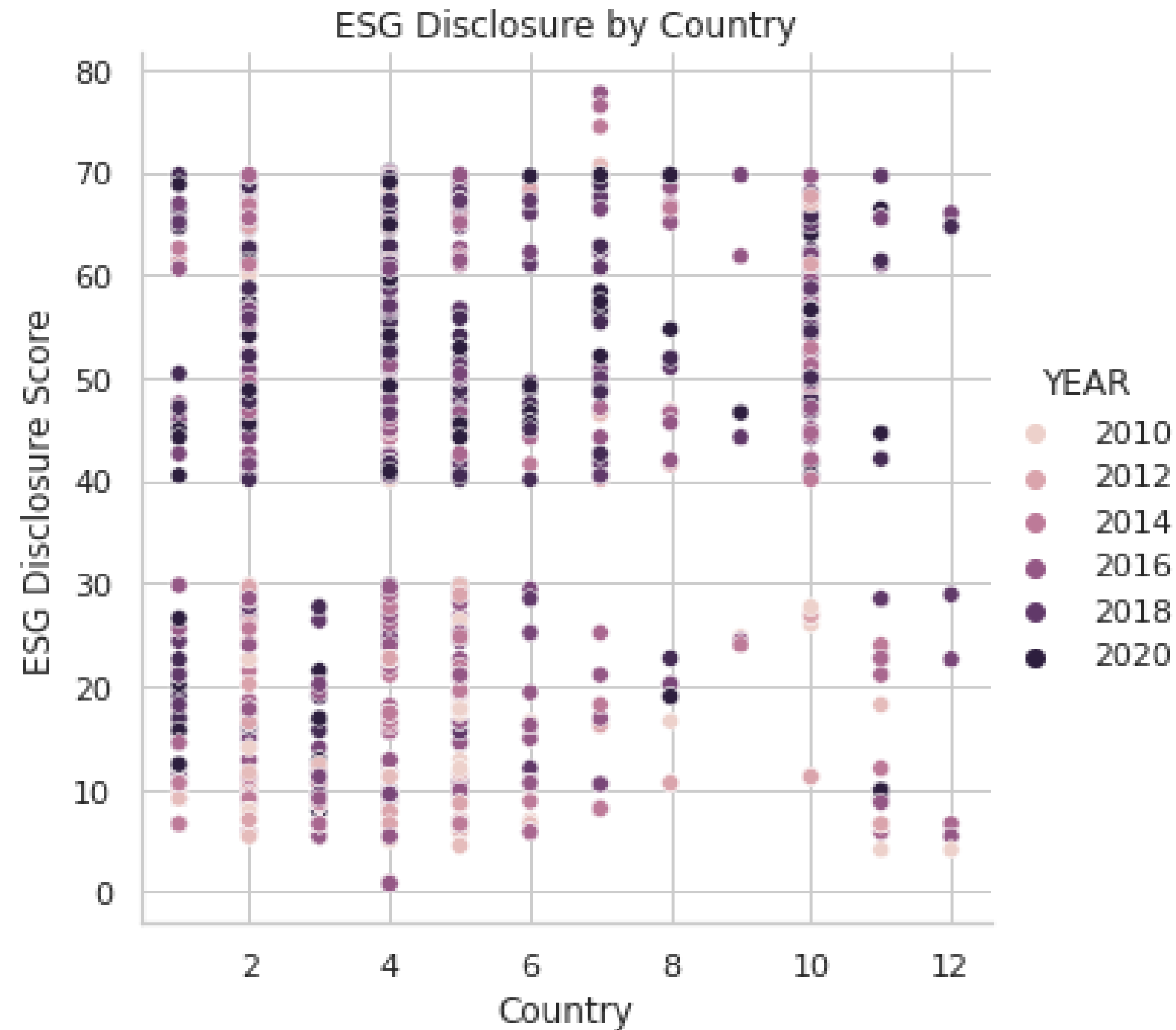
Insights

Comparing Countries

Some countries outperform or underperform the others

INSIGHT

- South Africa (10) has the highest density of high scores of 40-70
- Countries in the Middle East have more lower scores of 5-30
- European region shows a more equal score distribution



Countries	
Saudi Arabia	1
United Arab Emirates	2
Qatar	3
Russia	4
Poland	5
Turkey	6
Greece	7
Hungary	8
Czech Republic	9
South Africa	10
Kuwait	11
Egypt	12

Topic

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Comparing Countries

ESG Disclosure is not strongly related to Regulatory Quality



INSIGHT

- Almost no difference in ESG Disclosure as Regulatory Quality increases
- Interesting gap in data between ESG Disclosure scores of 30-40
- More data points seem to have been reported with higher Regulatory Quality

Topic

Dataset

Exploration

Limitations

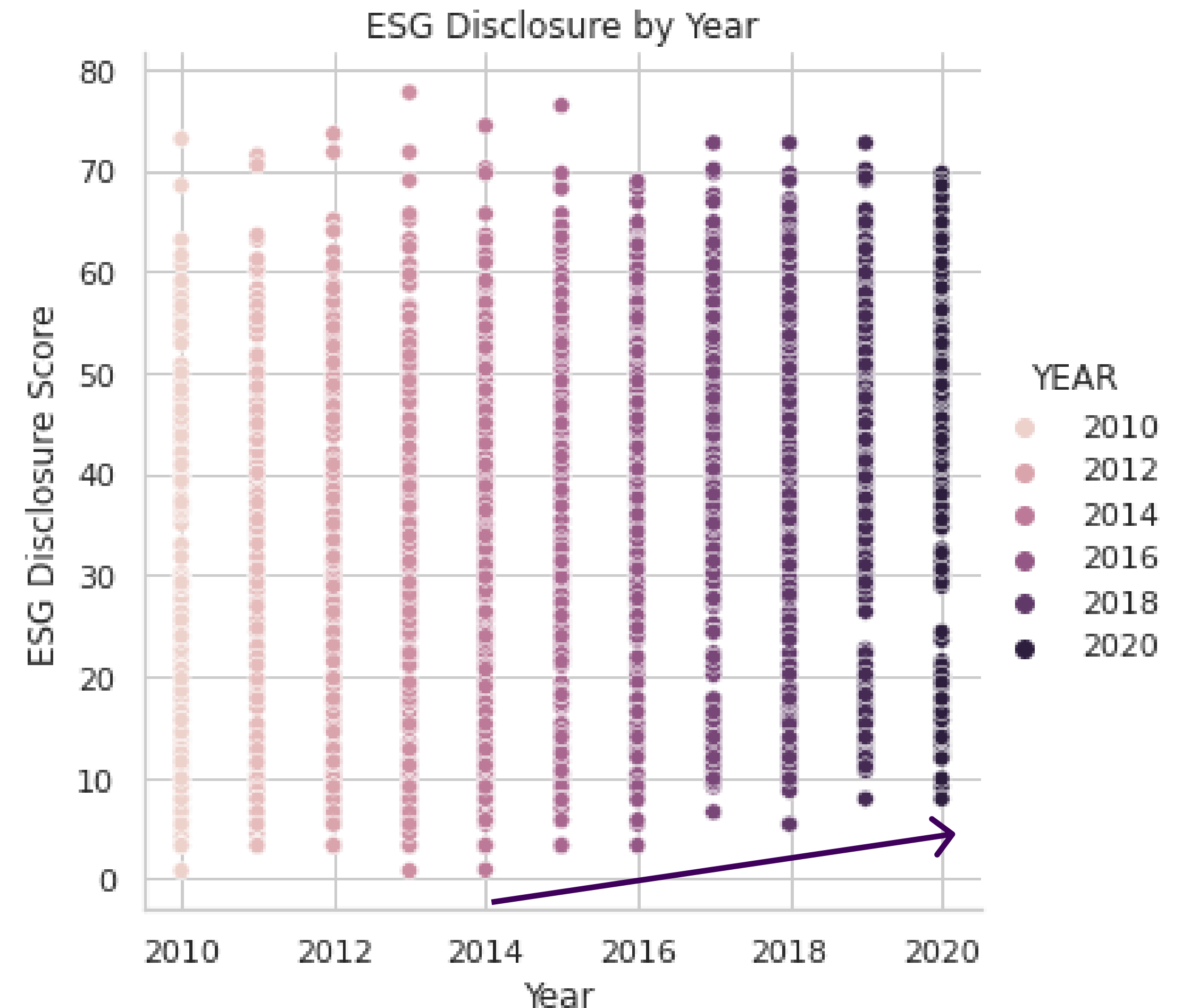
Insights

ESG Disclosure Over Time

Disclosure seems to improve over time

INSIGHT

- Slight upward trend in scores, with an increase in low scores from 0-10
- Score range becomes more concentrated in 2020 from 10-70 vs. 0-75 in 2010
- Reflects shifting focus towards ESG accountability, even in emerging markets



Topic

Dataset

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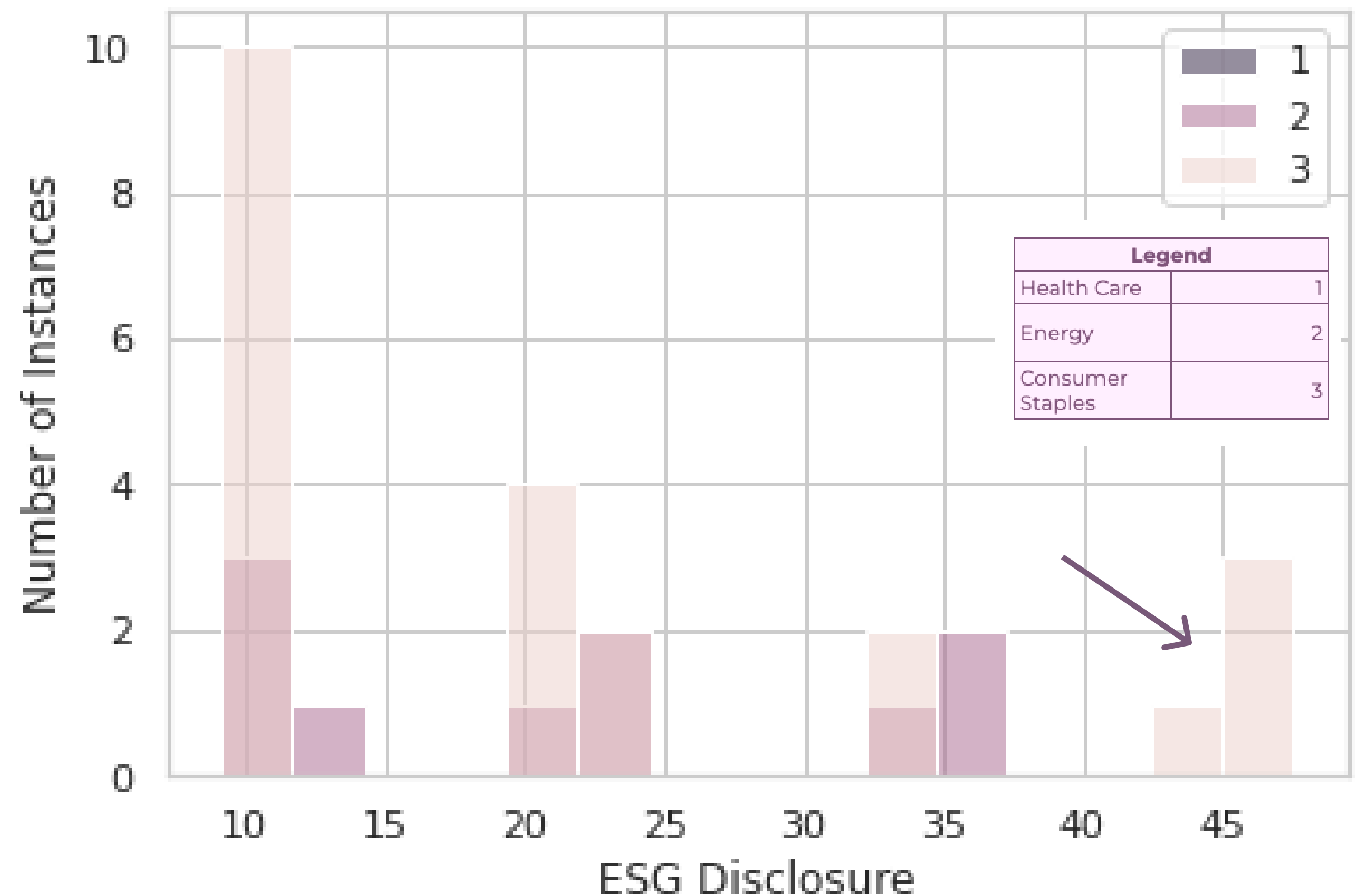
Comparing Sectors

ESG Disclosure Varies by Sector in Saudi Arabia

INSIGHT

- Consumer staples discloses the most, with scores reaching past 45
- Energy discloses the least amount of information shown by low scores under 35
- Reflects practices in each sector

Histogram of ESG Disclosure in Saudi Arabia by Sector



Topic

Dataset

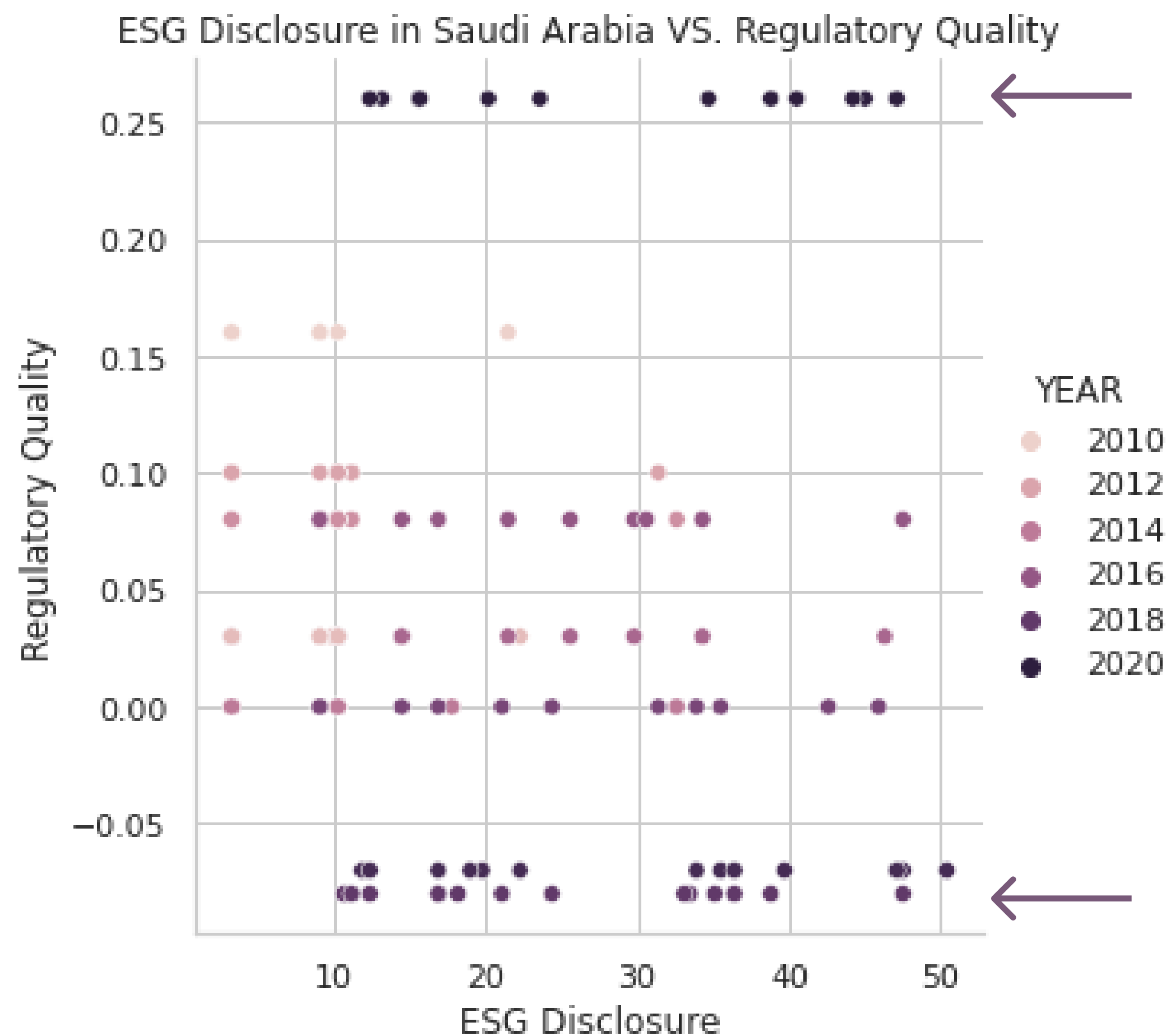
Exploration

Limitations

Insights

ESG and Regulation

Disclosure reflects time more than regulation in Saudi Arabia



INSIGHT

- ESG Disclosure Range of 0-50 seems fairly similar throughout
- Disclosure scores increase over time, range shortens from 10-50
- Pressure from consumers increased since 2010

Topic

Dataset

Exploration

Limitations

Insights

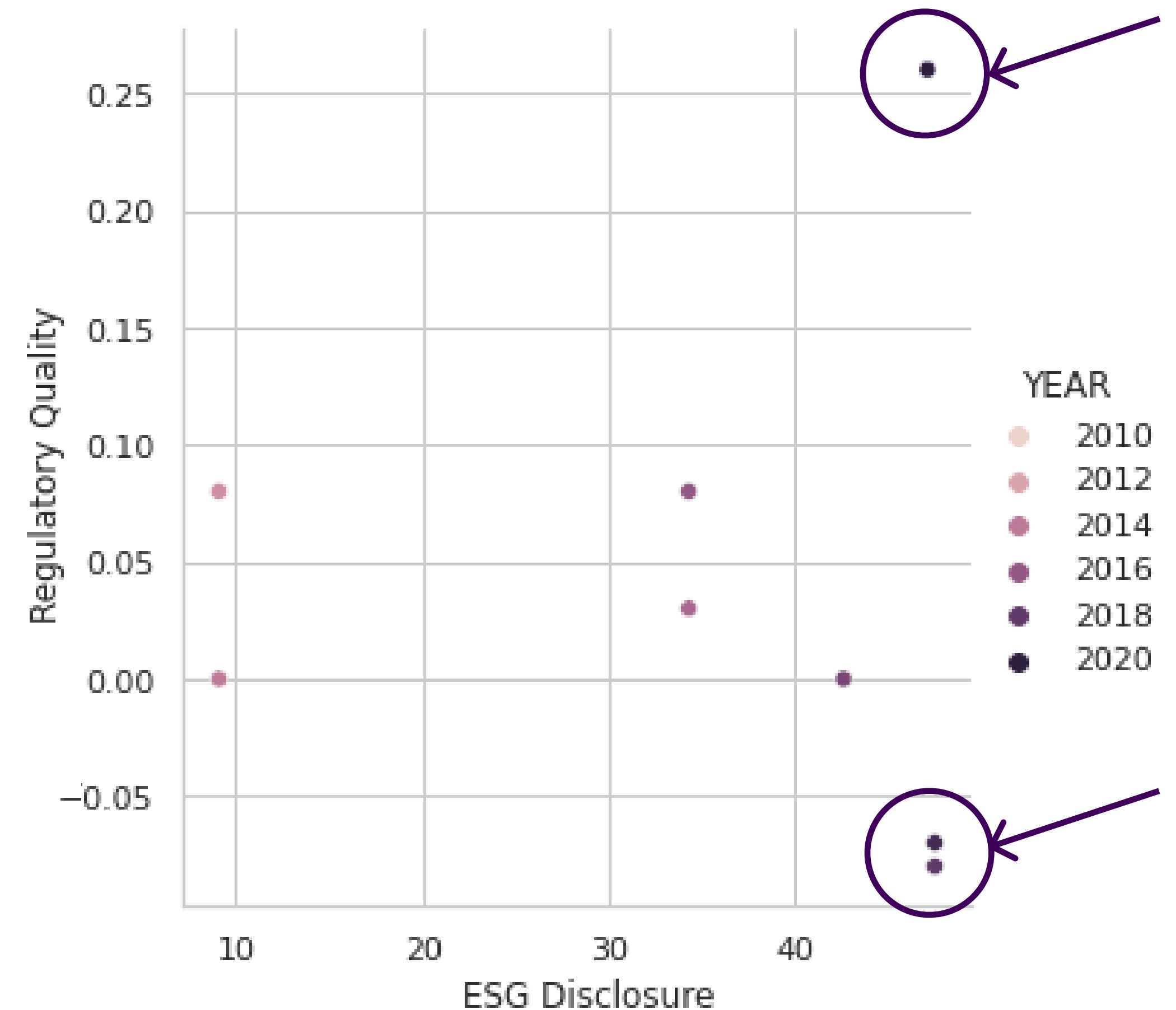
ESG and Regulation

Almarai, a Saudi Arabian company, reflects the overall data

INSIGHT

- Shows the same trend as previous data
- Huge increase in disclosure over time from ~10 to ~50
- Reflects previous Consumer Staples sector trends

Almarai's ESG Disclosure VS. Saudi Arabia's Regulatory Quality



Topic

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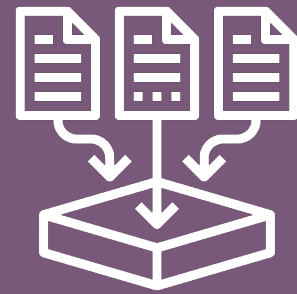
Limitations

Certain factors made it difficult to form conclusions



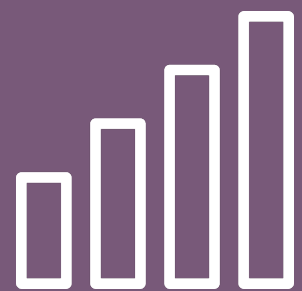
Missing Values

Having more data could impact final conclusions



Qualitative Data

Quantifying all of the qualitative data is difficult



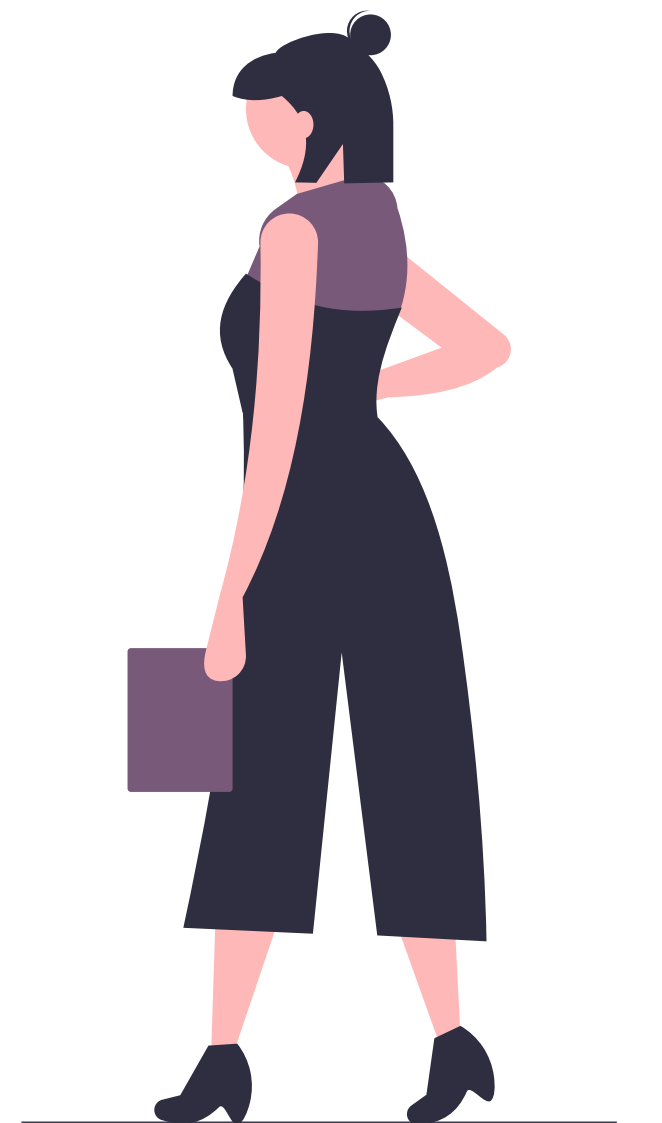
Reach of Dataset

Including more countries would provide more insight



Reach of Analysis

Contextualizing data with more factors is helpful



Topic

Dataset

Exploration

Limitations

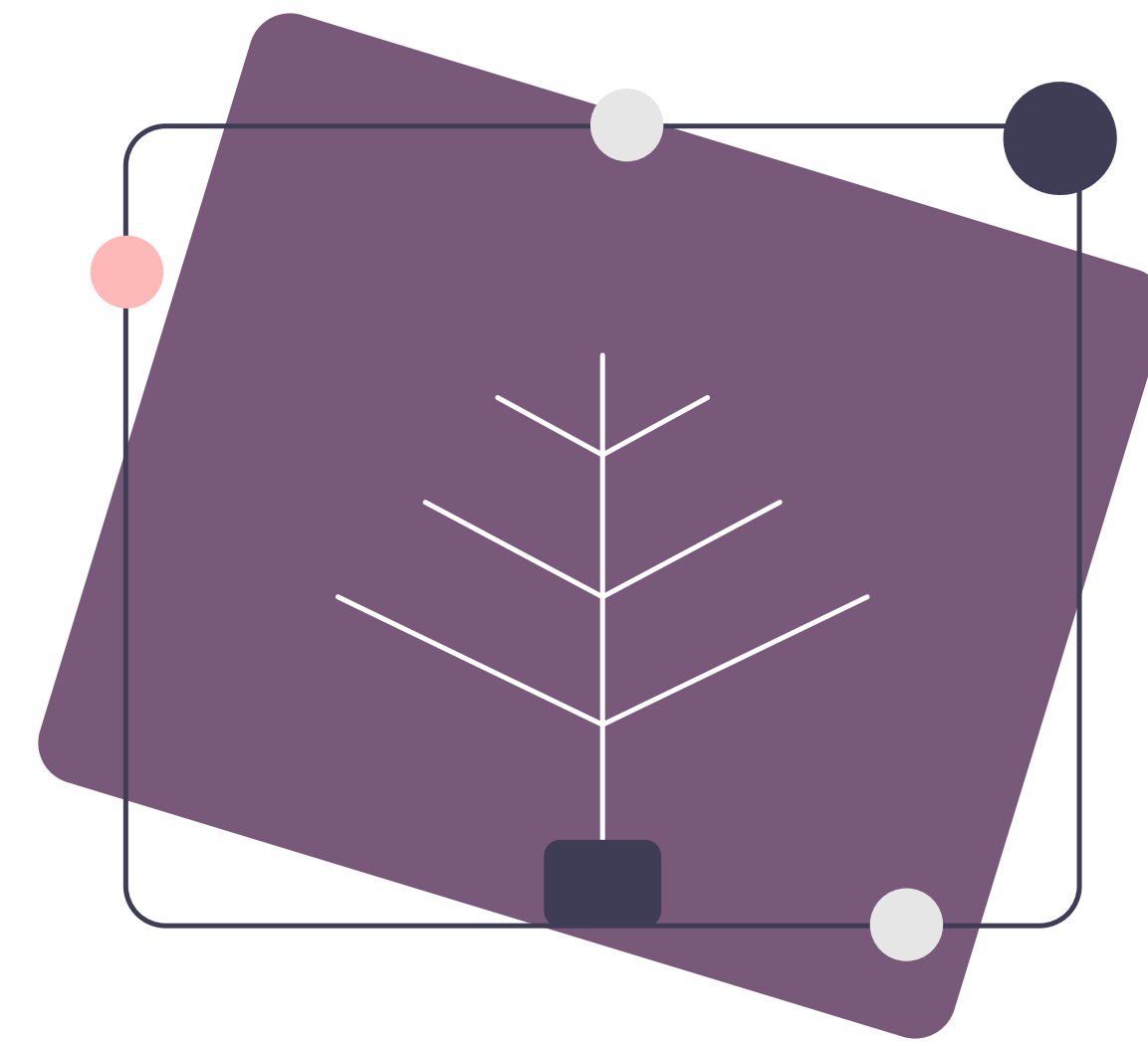
Insights

Business Insights

Overall, ESG focus is rising in the region

FUTURE IMPLICATIONS

- The connection between time and disclosure shows that ESG accountability has risen
- Companies must make an effort to be more conscious
- Governments should take stricter stances to promote better ESG focus



Topic

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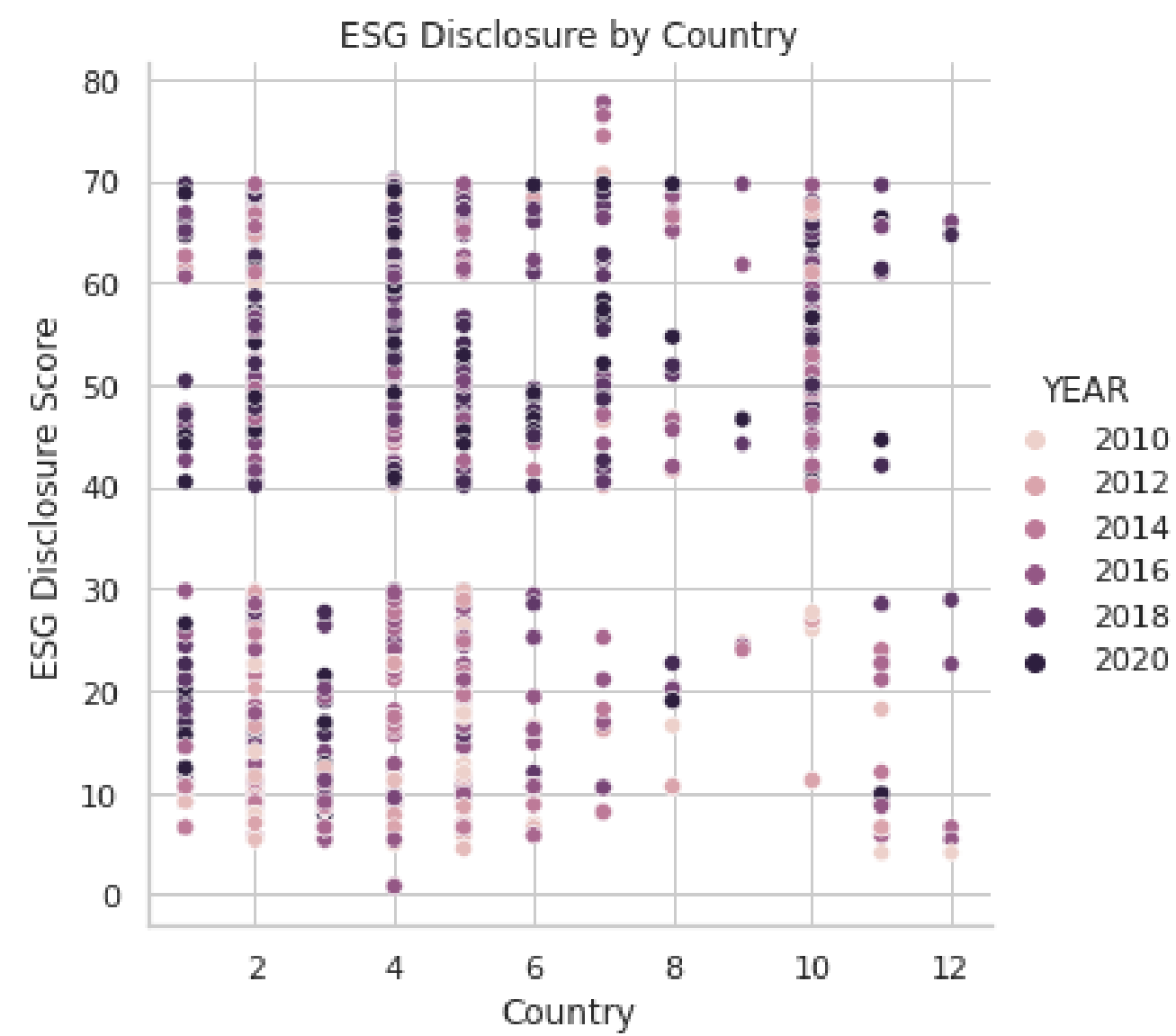


Thank You

Any Questions?

Appendix A

ESG Disclosure by Country



```
esg_c = pd.read_csv("/content/esg_countryNEW - Copy of cleaneresgdataset (1).csv")
sns.relplot(data = esg_c, x='COUNTRY',y='ESG_DISCL', hue='YEAR')
plt.title('ESG Disclosure by Country')
plt.xlabel('Country')
plt.ylabel('ESG Disclosure Score')
plt.show()
```

Appendix B

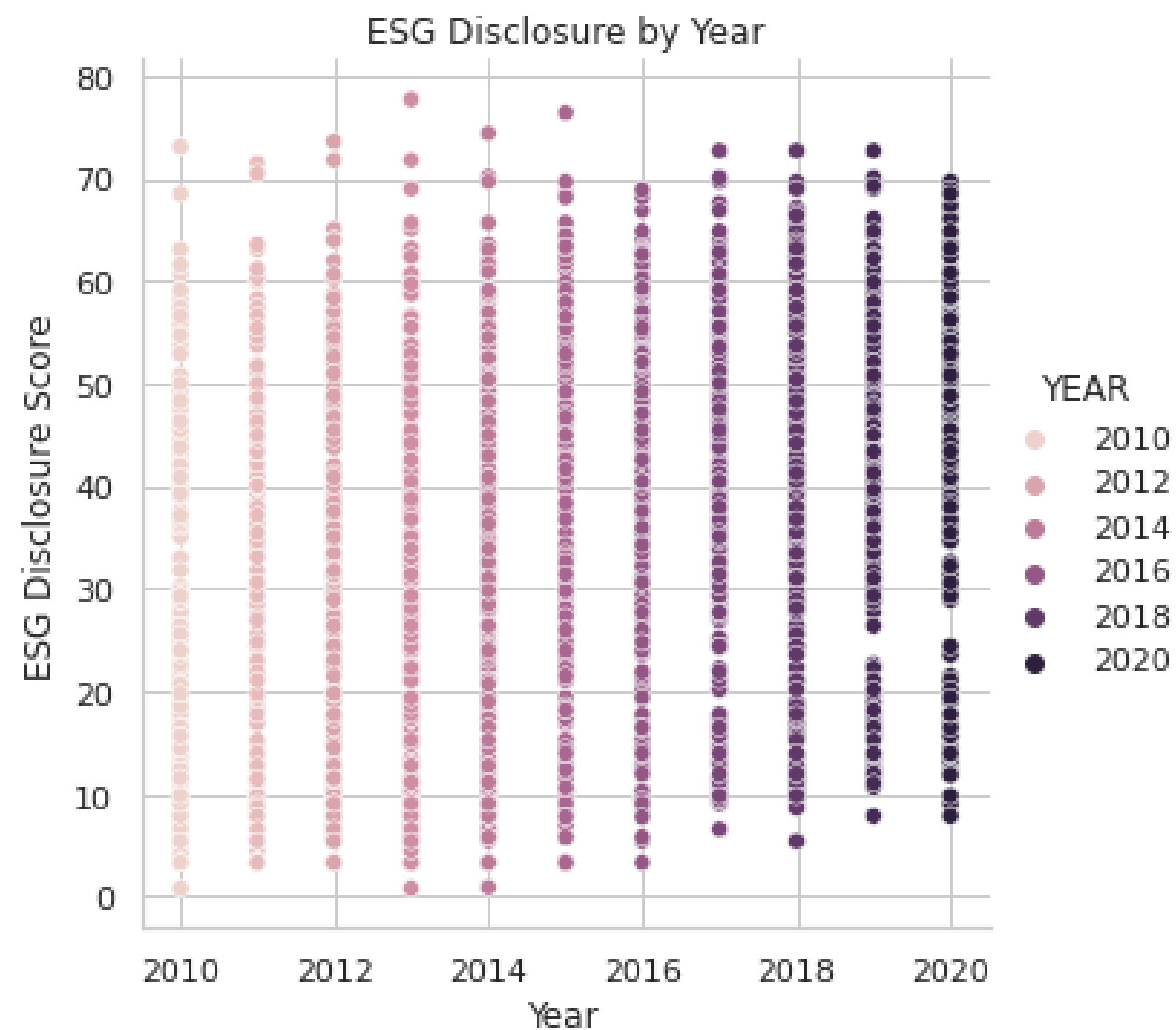
ESG Disclosure vs. Regulatory Quality



```
esg_c = pd.read_csv("/content/esg_countryNEW - Copy of cleaneresgdataset (1).csv")
sns.relplot(data = esg_c, x='REGULATORY_QUALITY', y='ESG_DISCL', color = "purple")
plt.title('Regulatory Quality and ESG Disclosure')
plt.xlabel('Regulatory Quality')
plt.ylabel('ESG Disclosure Score')
plt.show()
```


Appendix C

ESG Disclosure over time

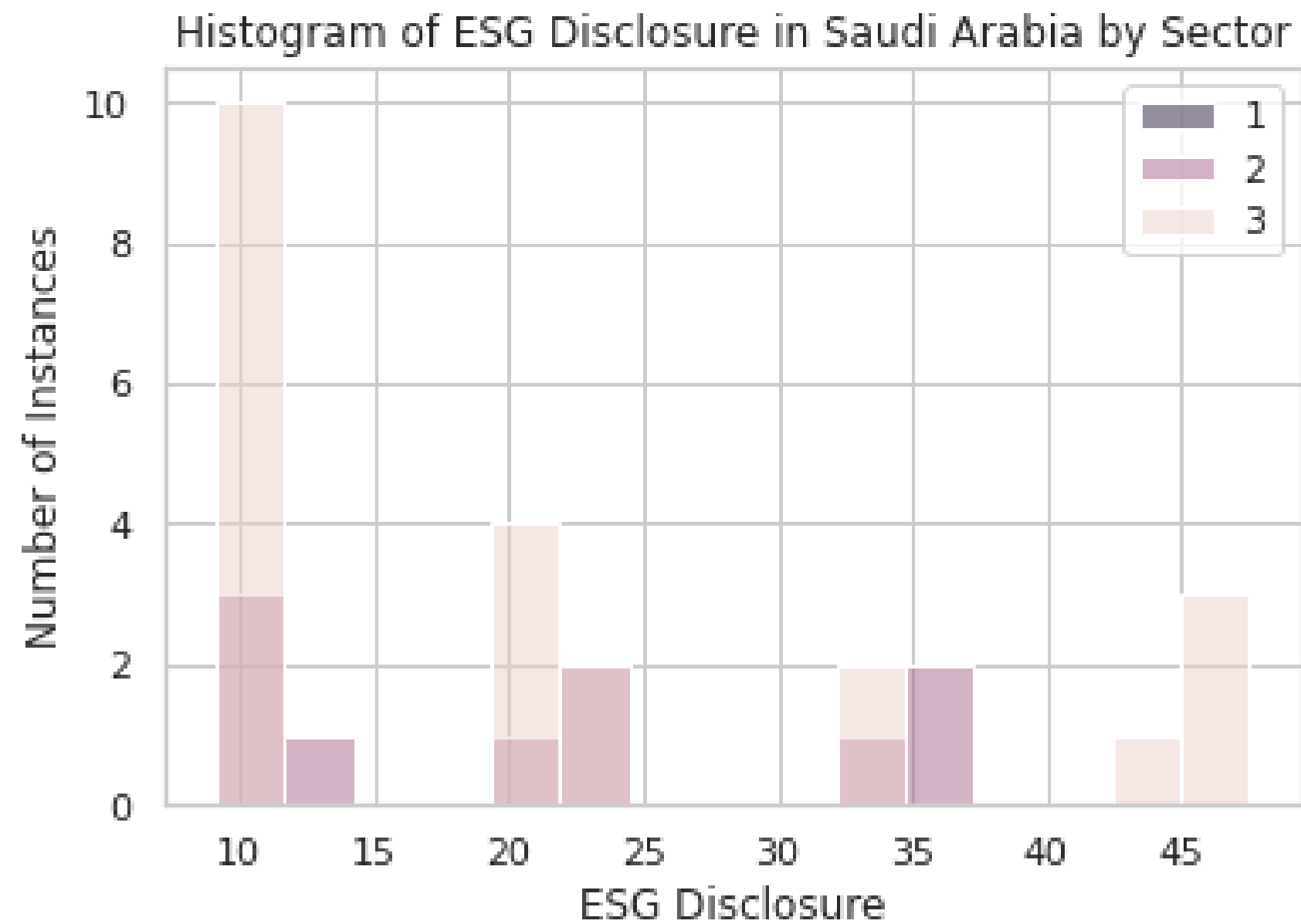


```
esg_t = pd.read_csv("/content/esg_time - cleaneresgdataset.csv")

sns.relplot(data = esg_t, x='YEAR', y='ESG_DISCL', hue='YEAR')
plt.title('ESG Disclosure by Year')
plt.xlabel('Year')
plt.ylabel('ESG Disclosure Score')
plt.show()
```

Appendix D

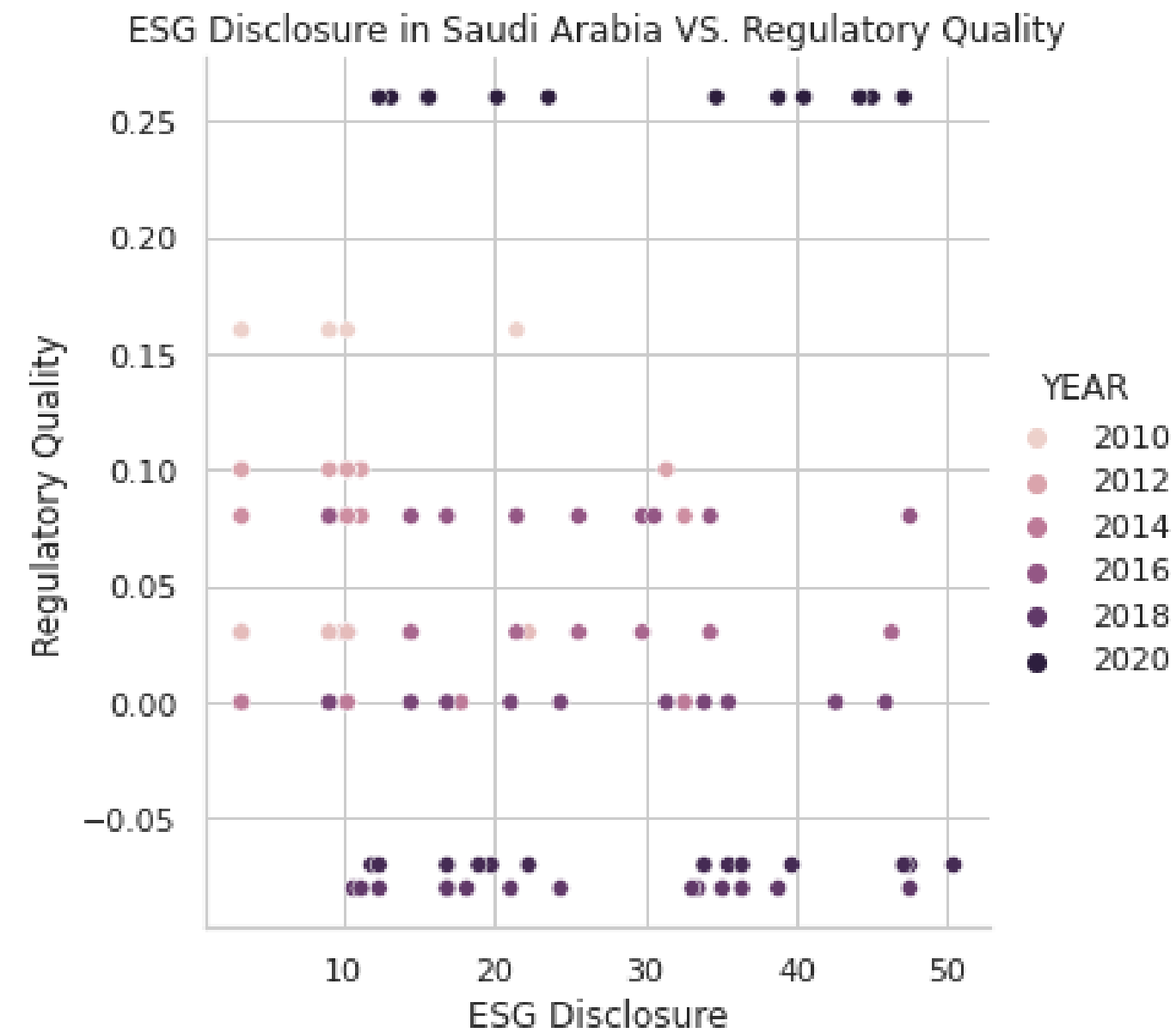
ESG Disclosure by Sector in Saudi Arabia



```
sns.histplot(data=saudisect, x='ESG_DISCL', hue='SECTOR', stat='count', edgecolor=None, bins = 15)
sns.mpl.pyplot.xlabel("ESG Disclosure")
sns.mpl.pyplot.ylabel("Number of Instances")
sns.mpl.pyplot.legend(stackedHistogram.index)
sns.mpl.pyplot.title("Almarai's ESG Disclosure VS. Saudi Arabia's Regulatory Quality")
```

Appendix E

ESG Disclosure vs. Regulatory Quality in Saudi Arabia



```
saudi = pd.read_csv("/content/bacesgproj - Sheet2.csv")
```

```
sns.relplot(data = saudi, x='ESG_DISCL', y='REGULATORY_QUALITY', hue='YEAR')
```

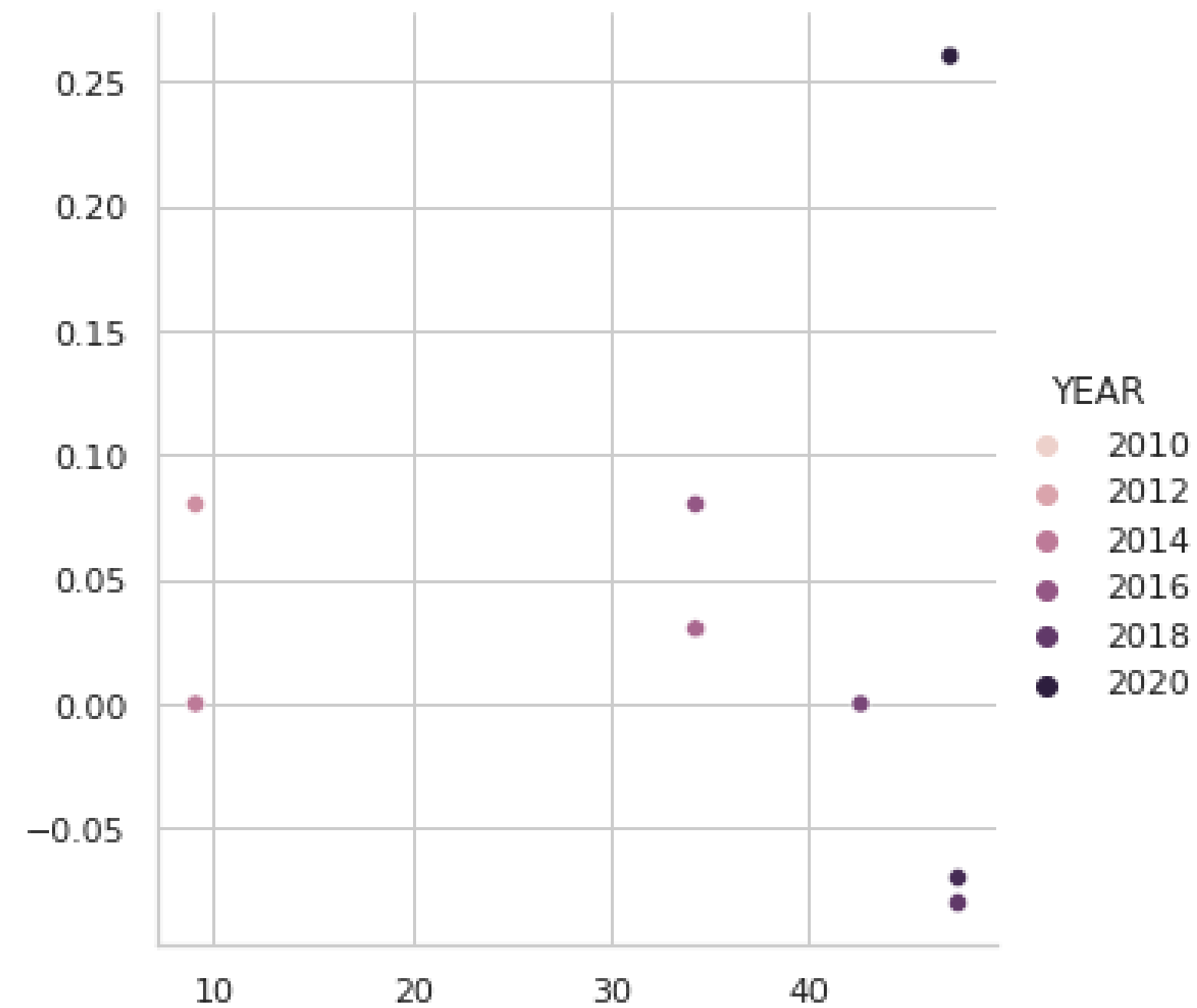
```
sns.mpl.pyplot.xlabel("ESG Disclosure")
```

```
sns.mpl.pyplot.ylabel("Regulatory Quality")
```

```
sns.mpl.pyplot.title("ESG Disclosure in Saudi Arabia VS. Regulatory Quality")
```

Appendix F

ESG Disclosure vs. Regulatory Quality For Almarai



```
almarai = esg.iloc [124:134]
print (almarai)
sns.relplot(data = almarai, x='ESG_DISCL', y='REGULATORY_QUALITY', hue='YEAR')
```