

Does Happiness Drive Road Safety?

Are happier and richer countries safer on the road? A European perspective from 2023

A data analytics project by Christos Georgakakis

based on:

(a) the Annual Statistical Report 2025 [Data set]. (2025, March 14) by the European Road Safety Observatory (European Commission, Directorate-General for Mobility and Transport), available at European Commission's website: https://road-safety.transport.ec.europa.eu/european-road-safety-observatory/data-and-analysis/annual-statistical-report_en (Last accessed and dataset downloaded on the 19th of August, 2025)

(b) the World Happiness Report 2025 "Data For Figure 2.1" by Helliwell, J. F., Layard, R., Sachs, J. D., Aknin, L. B., De Neve, J.-E., & Wang, S. (Eds.). (2023). World Happiness Report 2023 (11th ed.). Sustainable Development Solutions Network. Downloaded at: <https://www.worldhappiness.report/data-sharing/> (Last accessed and dataset downloaded on the 22nd of October, 2025)

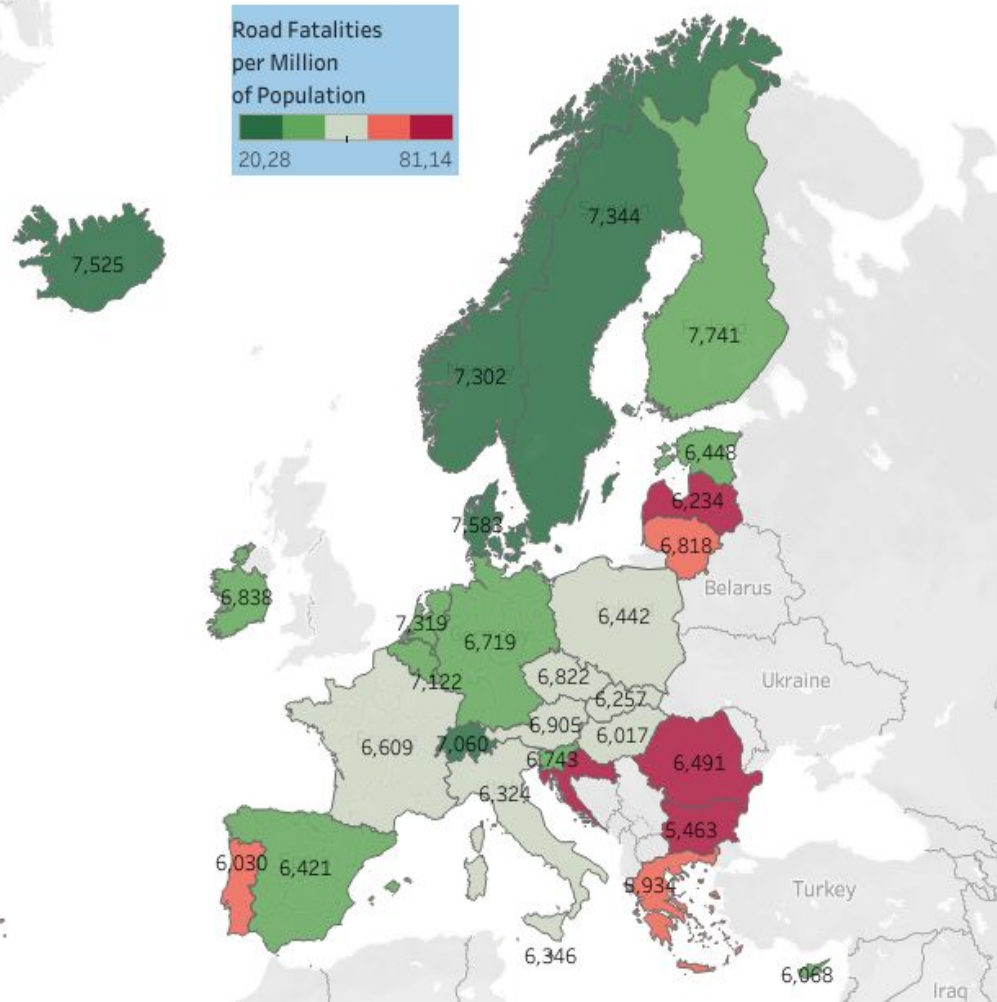
October, 2025

Key hypotheses

1. The happier a country is, the safer its citizens are on the road.
2. The more indispensable a country's economy is for its happiness, the safer its citizens are on the road.

Method and tools used

- Importing datasets to MySQL
- SQL query-based data cleaning, processing and analysis
- Exporting data to spreadsheets and reimporting them to MySQL, or importing them to Tableau Public
- Tableau Public visualizations
- Google Slides presentation



Highest number of road fatalities per million of population:

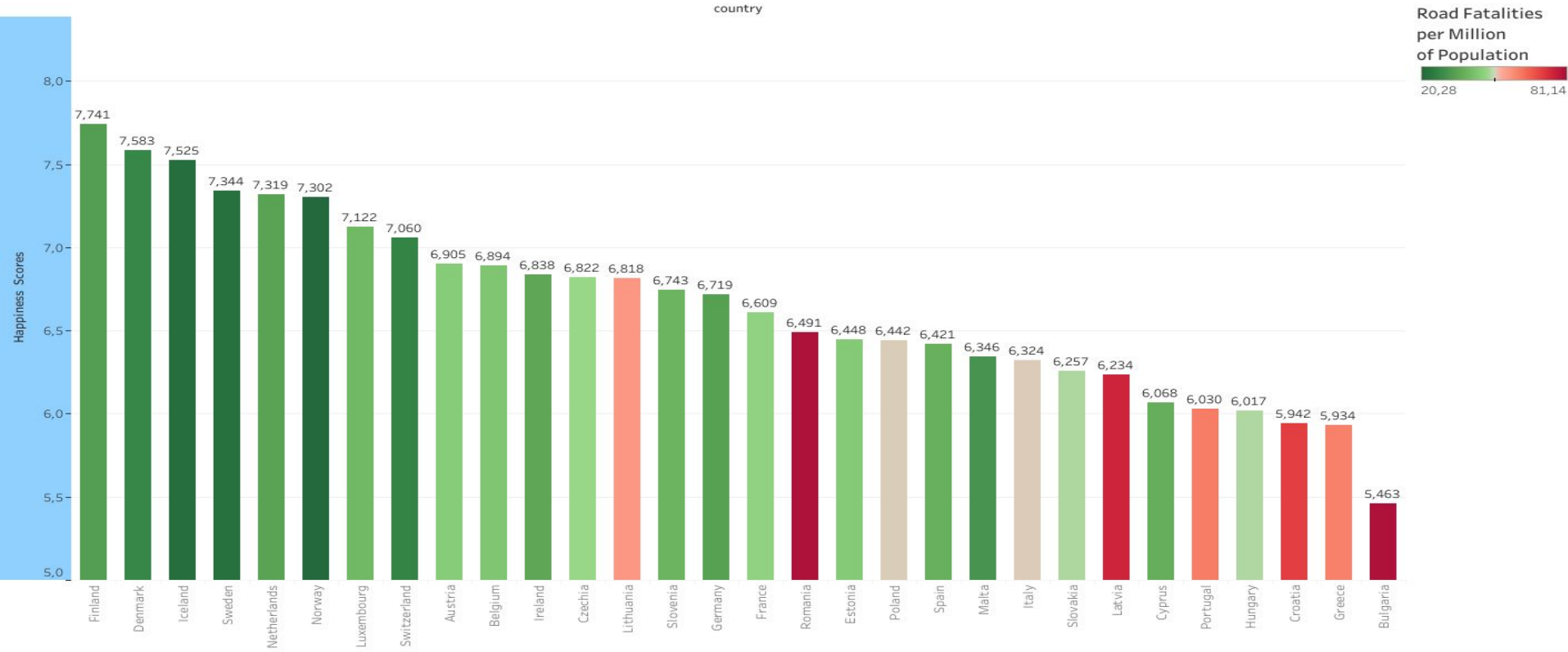
- Bulgaria (30th in happiness score: 5,463)
- Romania (17th in happiness score: 6,491)
- Latvia (24th in happiness score: 6,234)
- Croatia (28th in happiness score: 5,942)
- Portugal (26th in happiness score: 6,030)
- Greece (29th in happiness score: 5,934)

Lowest number of road fatalities per million of population:

- Norway (6th in happiness score: 7,302)
- Iceland (3rd in happiness score: 7,525)
- Sweden (4th in happiness score: 7,344)
- Switzerland (8th in happiness score: 7,060)
- Denmark (2nd in happiness score: 7,583)

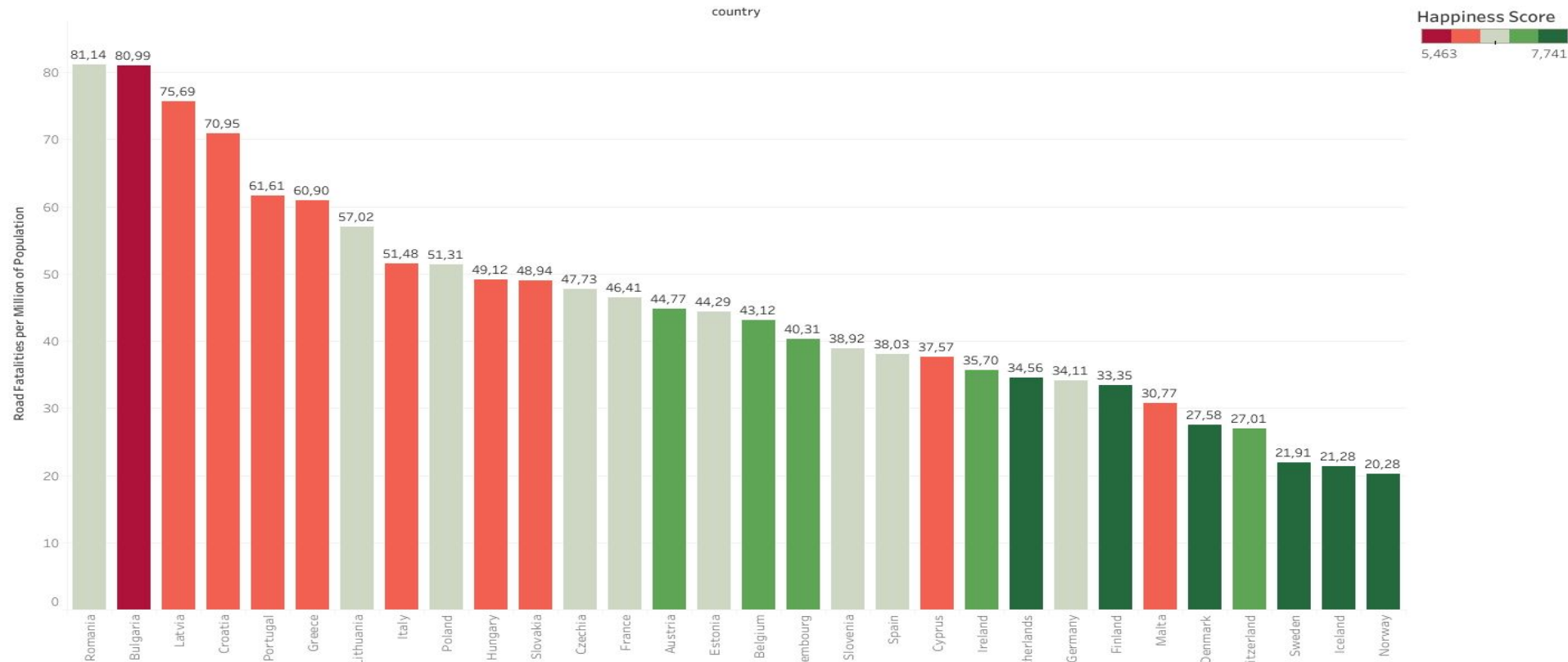
- Happier countries tend to have fewer road fatalities per million of population (2023)

Happiness Scores vs Road Fatalities in Europe, 2023



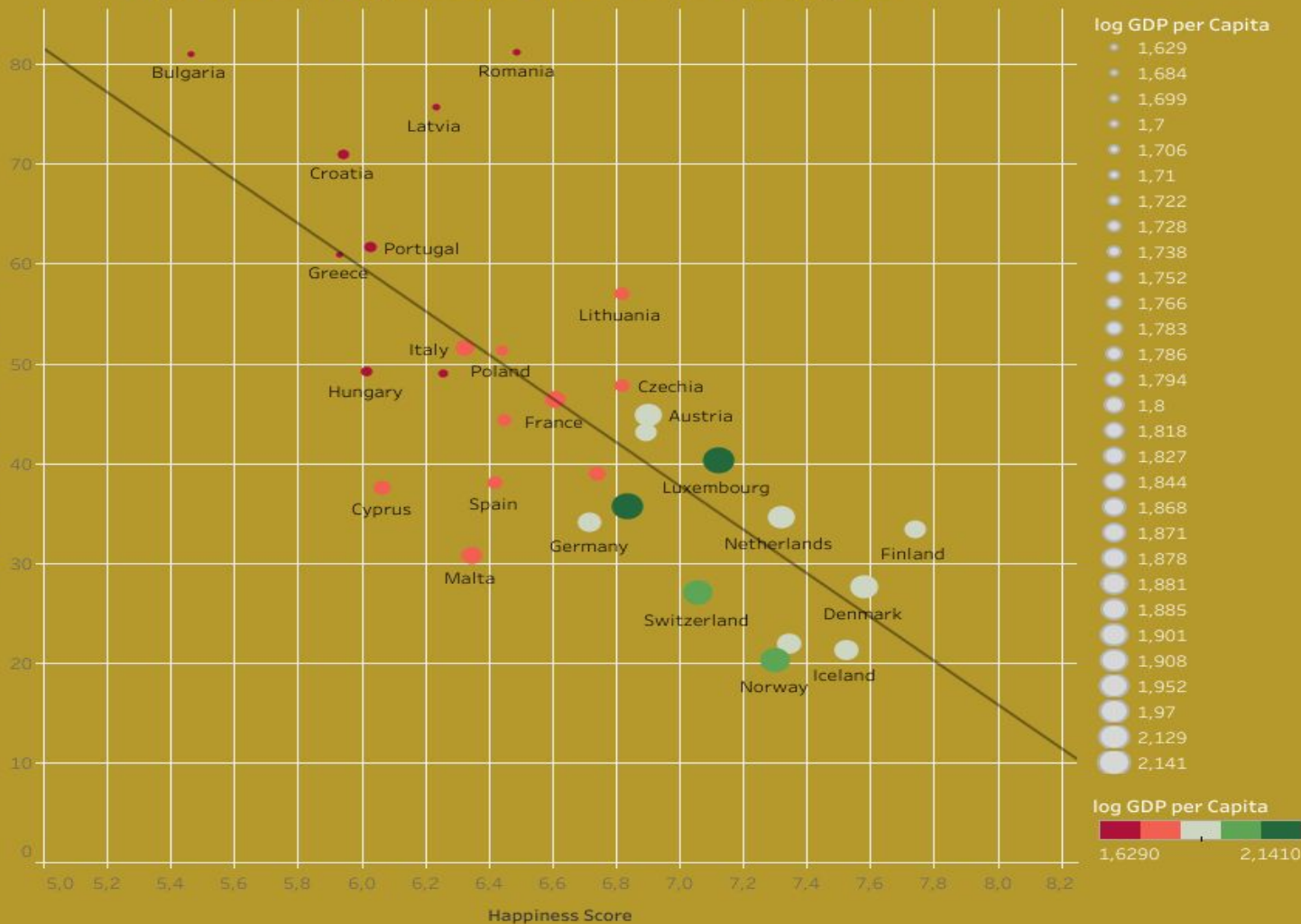
- Countries with higher number of road fatalities per million of population tend to be associated with lower happiness scores, and vice versa (2023)
- Notable exceptions:
Romania (1st in fatalities per million, but mid-level happiness score)
Cyprus and Malta (lower in fatalities per million, but also low-level happiness scores)

Road Fatalities per Million of Population vs Happiness in Europe, 2023



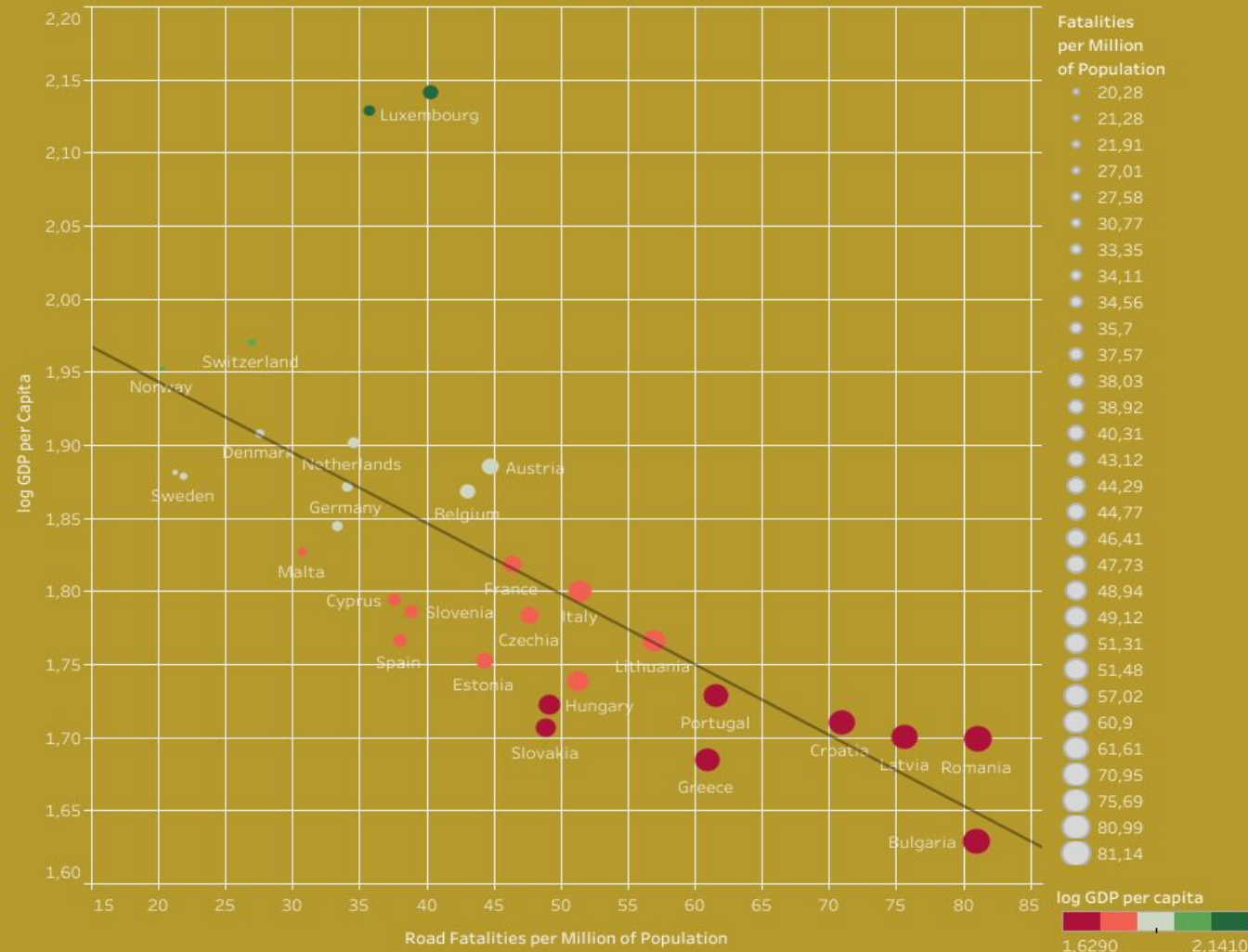
Road Fatalities vs Happiness and Economic Status in Europe, 2023

Road Fatalities per Million of Population



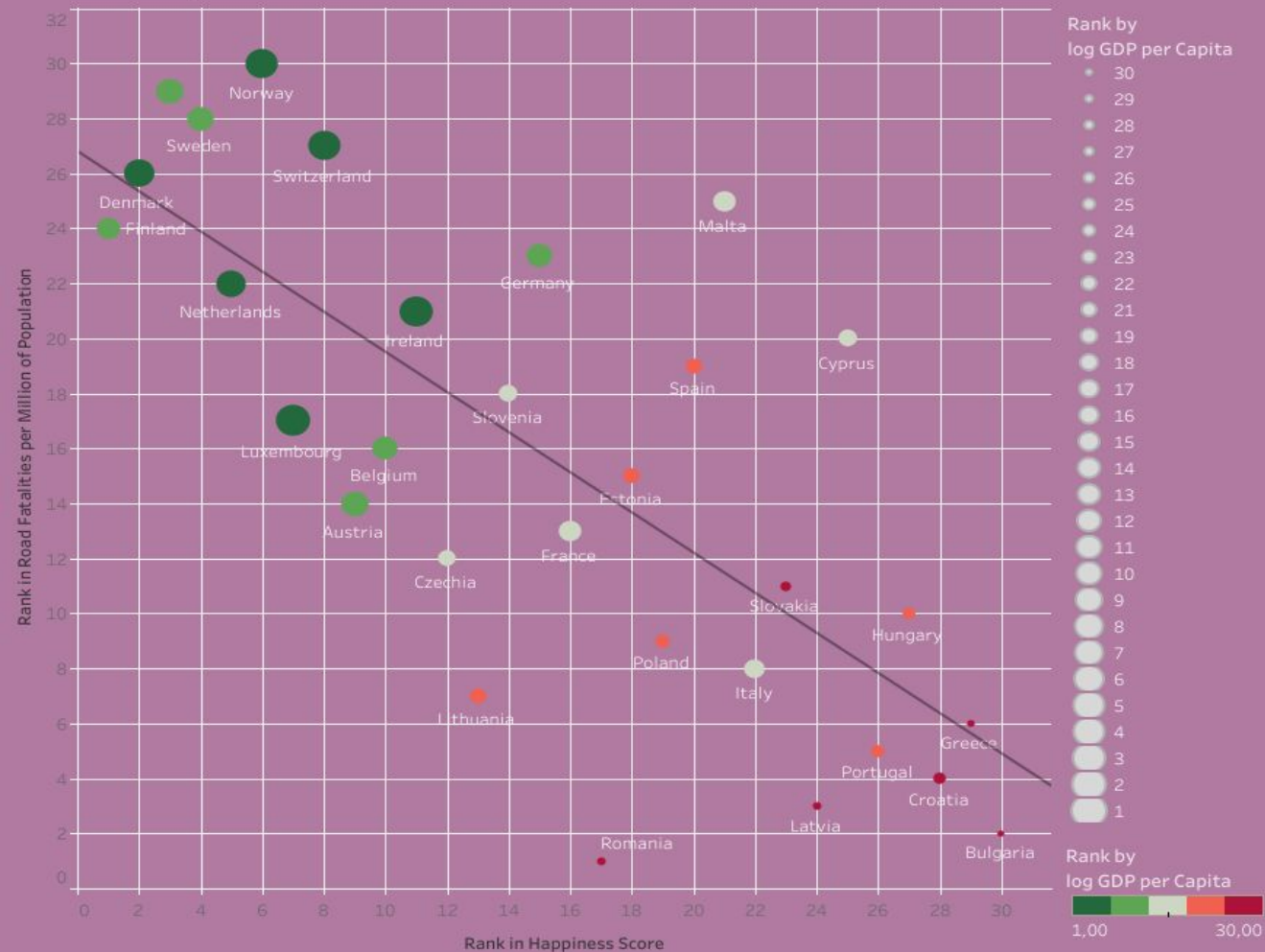
- Happier countries tend to be associated not only with less road fatalities per million, but also with higher log GDP per capita, and vice versa (2023).

Road Fatalities vs Economic Foundations of Happiness in Europe, 2023



- Countries in which economy does not have a high contribution towards their happiness, suffer from the highest number of road fatalities per million of population (2023).

Ranks of European Countries in Road Fatalities per Million of Population, Happiness and Economic Status, 2023



Countries that are ranked in best positions in happiness scores tend to:

- be ranked in the best positions in log GDP per capita, and
- have the lowest ranks in road fatality per million of population (2023).

Reversely, countries that are ranked in the worst positions in happiness scores tend to:

- be ranked in low positions in log GDP per capita, and
- have the highest ranks in road fatality per million of population (2023).

Key findings (concerning European countries in 2023)

- The happier a country is, the fewer road deaths per million of population it tends to have.
- The more road deaths per million of population a country has, the more likely it is that it is associated with lower happiness scores.

Notable Outliers:

Romania (1st in fatalities per million, but mid-level happiness score)

Cyprus and Malta (lower in fatalities per million, but also low-level happiness scores.

- Higher happiness scores are correlated with higher log GDP per capita.
- Higher log GDP per capita correlates with fewer road fatalities per million of population.
- Higher number of road fatalities per million of population is associated with lower log GDP per capita.

Notable exceptions: Luxembourg and Ireland have the highest log GDP per capita, but the number of their road fatalities per million of population is close to mid-level (but still on the lower end).

- In sum, the highest ranks in happiness scores are associated with higher ranks in log GDP per capita and lower ranks in road fatality per million of population, and vice versa.

Key insights

- Happiness and road safety are strongly linked.
- Economic prosperity, which is a factor contributing to higher happiness scores, relates to road safety as well.
- Wellbeing may both reflect and reinforce safety.
- In happier and more prosperous countries, citizens enjoy better infrastructure and institutions, and potentially a more widely shared sense of responsibility. These psychological and sociopolitical conditions might ground more cautious driving behavior and lower accident rates. Conversely, lack of life satisfaction, economic pressure, or diminished responsible behavior may increase risk in ordinary decision-making and reduce attentiveness on the road.
- These results indicate correlations, not proof that happiness *causes* fewer fatalities.

Further research recommendations

- Collect data from the years before 2023 to check whether the trends persist over time.
- Update the dataset with the years 2024 and 2025, to see whether the findings about 2023 are confirmed or falsified by the expanded dataset.
- Expand the dataset beyond Europe.
- Future work could incorporate data about the quality of the countries' infrastructure, their investment in it, as well as the quality of their traffic-law enforcement.
- Blend data analytics with social psychology and moral philosophy research, with the aim of investigating the psychological and social mechanisms that may drive the happier countries' enhanced road safety and the less happier countries' increased road risk.

Many thanks for your attention!