

Vis analysis

Group 8

2025-02-06

Data types

The dataset has several datatypes. All of them have year and country.

- country (Categorical): Name of EU country
- year (Ordinal): Year in which data was recorded

SDG 3 datatypes:

- unit (Categorical): Measurement unit of people smoking
- sex (Categorical): Gender category
- smoking (Quantitative/Continuous): Percentage of total population that smokes

SDG 5 datatypes:

- unit (Categorical): Measurement unit of people outside that is outside the labour force due to caring responsibilities
- sex (Categorical): Gender category
- outside_labour_caring (Quantitative/Continuous): Percentage of total population

SDG 8 datatypes:

- unit (Categorical): Measurement unit of total population that is neither employed nor in education
- sex (Categorical): Gender category
- not_emp_edu (Quantitative/Continuous): Percentage of total population

SDG 9 datatypes:

- unit (Categorical): Measurement unit - share of buses and trains
- vehicle (Categorical): Type of vehicle
- bus_train (Quantitative/Continuous): Percentage of of total inland passenger transport

SDG 11 datatypes:

- unit (Categorical): Measurement unit of deaths in road accidents
- traffic (Categorical): Type of road infrastructure
- deaths (Quantitative/Discrete): (Number/rate) of deaths in road accidents (discrete if we use numbers, continuous if we use ratio)

SDG 12 datatypes:

- unit (Categorical): Measurement unit (Planetary Boundary or per inhabitant)
- consumption (Quantitative/Continuous): Level of resource consumption measured against planetary boundaries or per inhabitants (Ratio)

SDG 16 datatypes:

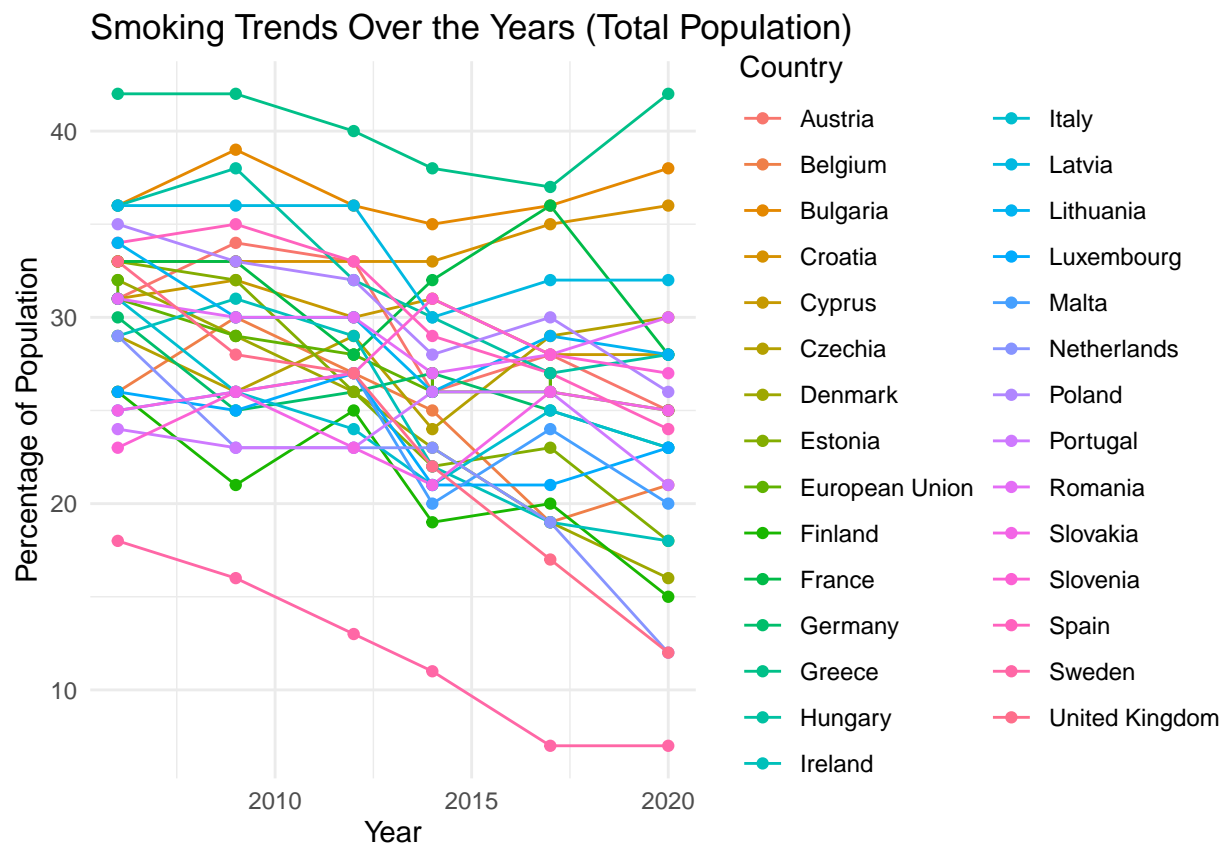
- unit (Categorical): Measurement unit (Percentage)
- income_group (Categorical): Income category
- rrycrime (Quantitative/Continuous): Crime rate percentage based on the income group

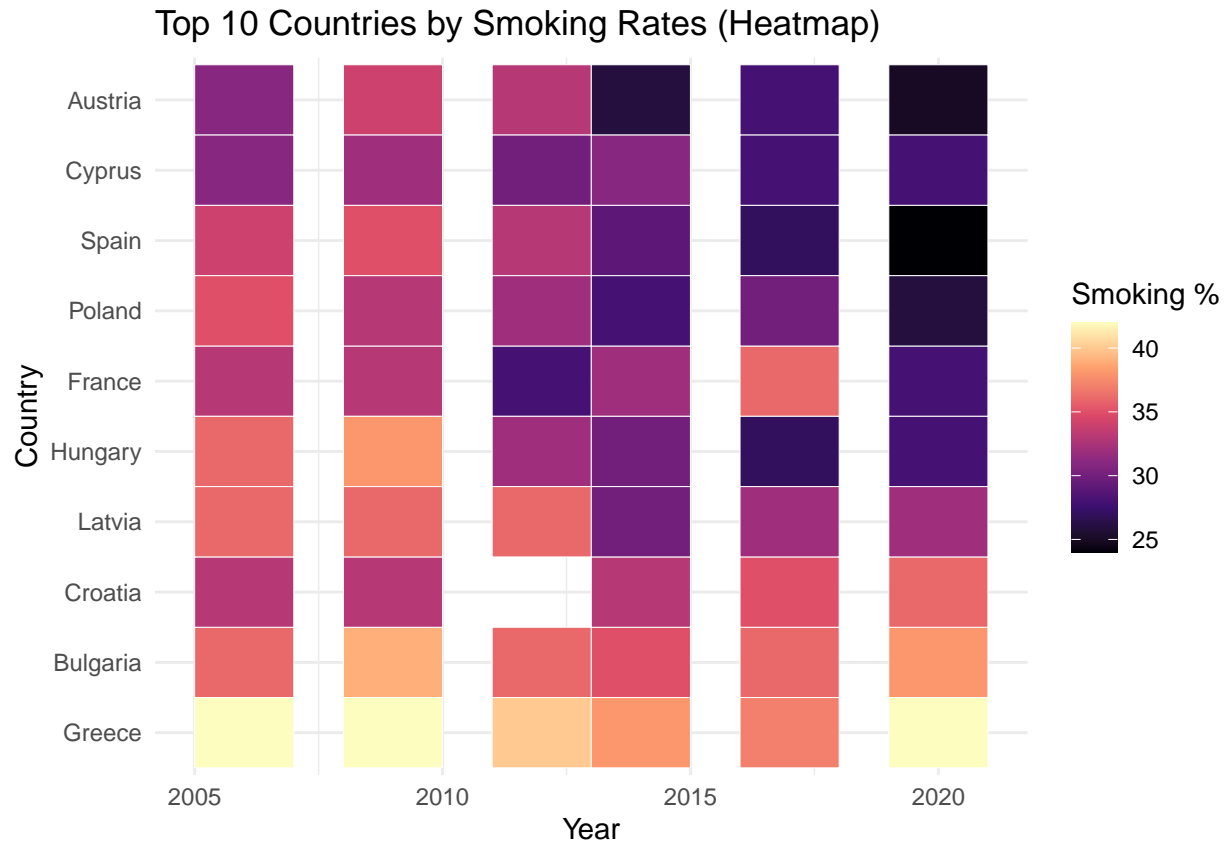
SDG 3 - Good Health and Well-Being

Ensure healthy lives and promote well-being for all at all ages

Sustainable Development Goal (SDG) 3 aims to ensure healthy lives and promote well-being for all at all ages. It focuses on reducing maternal and child mortality, combating infectious diseases (HIV, tuberculosis, malaria), promoting universal health coverage, improving mental health, and tackling non-communicable diseases (e.g., heart disease, diabetes).

We have decided to look specifically at Smoking and how it has changed through the years.



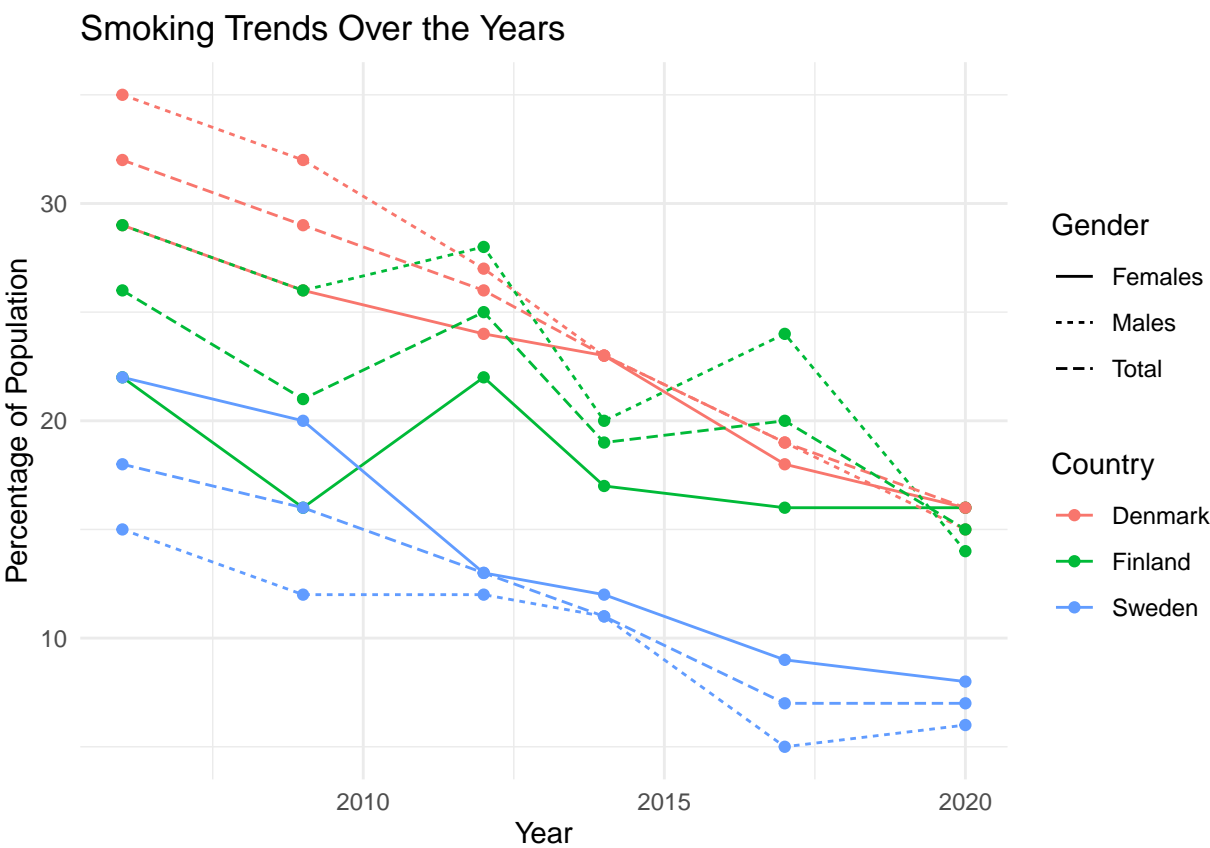
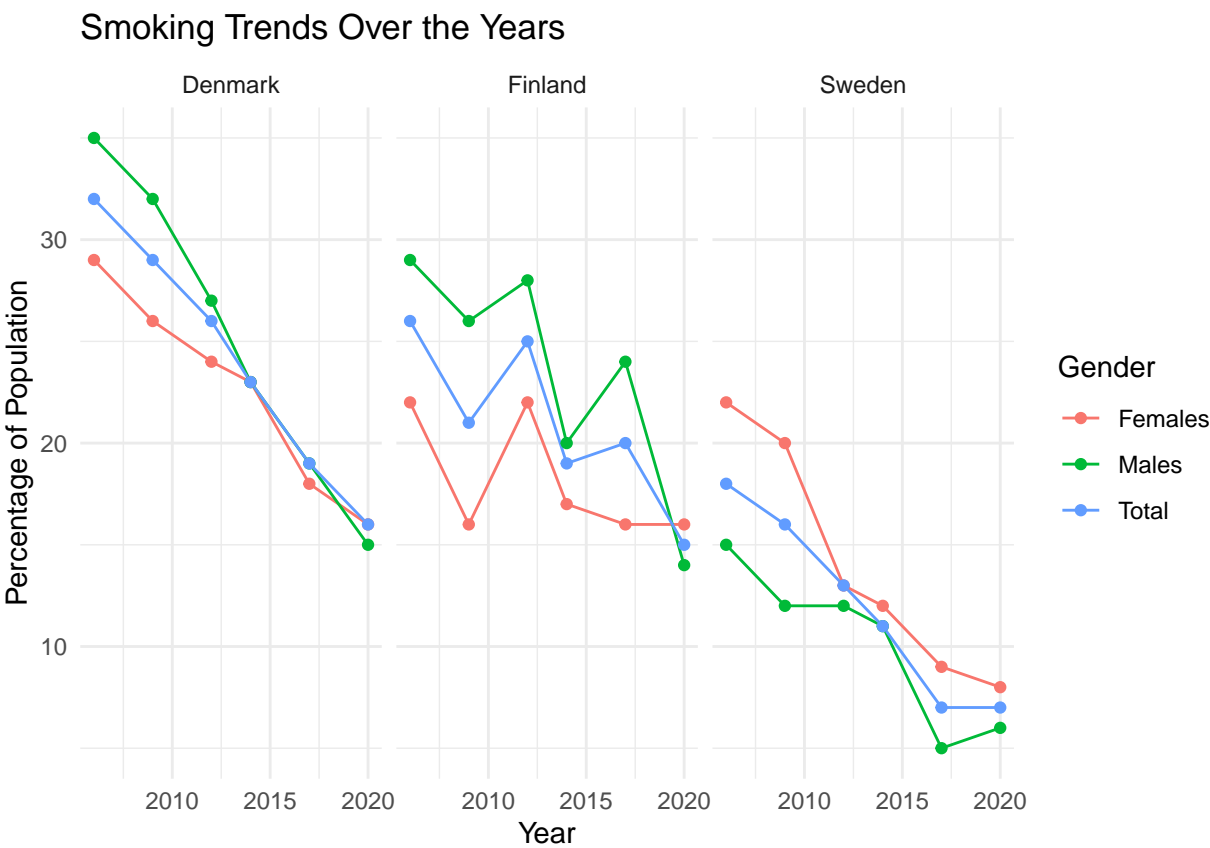


```
## # A tibble: 2 x 4
##   year mean_smoking sd_smoking count
##   <dbl>     <dbl>     <dbl> <int>
## 1  2006         30.5         4.85     30
## 2  2020         24.2         7.68     30

##
## Welch Two Sample t-test
##
## data:  smoking by year
## t = 3.7791, df = 48.939, p-value = 0.0004278
## alternative hypothesis: true difference in means between group 2006 and group 2020 is not equal to 0
## 95 percent confidence interval:
##  2.934221 9.599112
## sample estimates:
## mean in group 2006 mean in group 2020
##           30.46667           24.20000
```

A Welch's independent t-test was conducted to compare smoking rates between 2006 and 2020. The results indicated a statistically significant decrease in smoking rates over time, $t(48.94) = 3.78$, $p < .001$, 95% CI [2.93, 9.60]. The mean smoking rate in 2006 ($M = 30.47$, $SD = 4.85$) was significantly higher than in 2020 ($M = 24.20$, $SD = 7.68$), suggesting a notable decline in smoking prevalence over the 14-year period.

Nordics isolated



SDG 5 - Gender Equality

Achieve gender equality and empower all women and girls

Sustainable Development Goal (SDG) 5 aims to achieve gender equality and empower all women and girls. It focuses on eliminating discrimination, violence, and harmful practices (e.g., child marriage, female genital mutilation), ensuring equal opportunities in leadership and economic participation, and universal access to sexual and reproductive health rights.

We have decided to look at...

SDG 8 - Decent Work and Economic Growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Sustainable Development Goal (SDG) 8 aims to promote inclusive and sustainable economic growth, full and productive employment, and decent work for all. It focuses on:

- Sustained GDP growth and increased productivity
- Job creation and entrepreneurship
- Labor rights and safe working conditions
- Ending modern slavery, forced labor, and child labor
- Financial inclusion and equal access to economic resources

We have decided to look at...

SDG 9 - Industry, Innovation, and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Sustainable Development Goal (SDG) 9 aims to build resilient infrastructure, promote sustainable industrialization, and foster innovation. It focuses on:

- Expanding reliable and sustainable infrastructure (transport, energy, digital access).
- Supporting inclusive and sustainable industrialization with job creation.
- Increasing investment in R&D and innovation, especially in developing industries.
- Promoting clean technologies and environmentally friendly production.

We have decided to look at...

SDG 11 - Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable

Sustainable Development Goal (SDG) 11 aims to make cities inclusive, safe, resilient, and sustainable. It focuses on:

- Affordable housing and reducing slums.
- Sustainable urban transport and mobility.
- Reducing air pollution and environmental impact.
- Disaster risk reduction and climate resilience.
- Preserving cultural and natural heritage.

We have decided to look at...

SDG 12 - Responsible Consumption and Production

Ensure sustainable consumption and production patterns

Sustainable Development Goal (SDG) 12 aims to ensure sustainable consumption and production patterns by:

- Reducing waste and pollution (food waste, plastic, industrial emissions).
- Promoting circular economy models (recycling, reusing, and reducing resource use).
- Encouraging sustainable business practices and corporate responsibility.
- Improving resource efficiency in production and supply chains.
- Raising awareness about sustainable consumption among individuals and businesses.

We have decided to look at...

SDG 16 - Peace, Justice, and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Sustainable Development Goal (SDG) 16 aims to promote peaceful and inclusive societies, provide access to justice for all, and build effective, accountable institutions. It focuses on:

- Reducing violence, corruption, and organized crime.
- Ensuring access to justice and human rights for all individuals.
- Strengthening democratic institutions and governance.
- Protecting fundamental freedoms and promoting transparency.
- Reducing illicit financial flows and bribery.

We have decided to look at...