

DATA VISUALIZATION COURSE
FACULTY OF SOCIAL SCIENCES
UNIVERSITY OF LJUBLJANA

project presentation

VISUALIZING THE SOCIAL AND ECONOMIC
IMPACTS OF TOURISM ON SLOVENIAN TOWNS

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01/12

NIVES HÜLL

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intro

Tourism is often celebrated as an economic success story.

BUT WHAT HAPPENS TO LOCAL COMMUNITIES IN TOURIST TOWNS?

This project uses data visualization to explore the *hidden social and economic impacts of tourism* on Slovenian municipalities and towns — from housing prices to migration patterns.

story

In recent years, tourism has transformed many Slovenian towns.

At the same time, locals, *especially young people*, face growing challenges:

- Soaring housing prices
- Stagnant wages
- Out-migration
- Aging populations

data

Data sources:

- Statistical Office of the Republic of Slovenia (SURS)
- e-Prostor (real estate value data)

Data collection:

- Initial goal: visualize overnight stays and accommodation capacity, but AJPES data was not easily accessible
- Adjusted focus to variables that were more obtainable and relevant
- Considered including commuting patterns (workplace location), but excluded to avoid overloading the visual story
- Housing data was difficult to obtain; approximate values were manually extracted from e-Prostor publications
- Data preparation and cleaning done in Excel; all variables combined into a long-format table

Notes:

- Property price values are approximate (regional averages)
- Focus: selected tourist municipalities, control cities, Ljubljana

Variables:

- municipality type (tourist vs. control)
- average salary
- property prices
- age
- migration

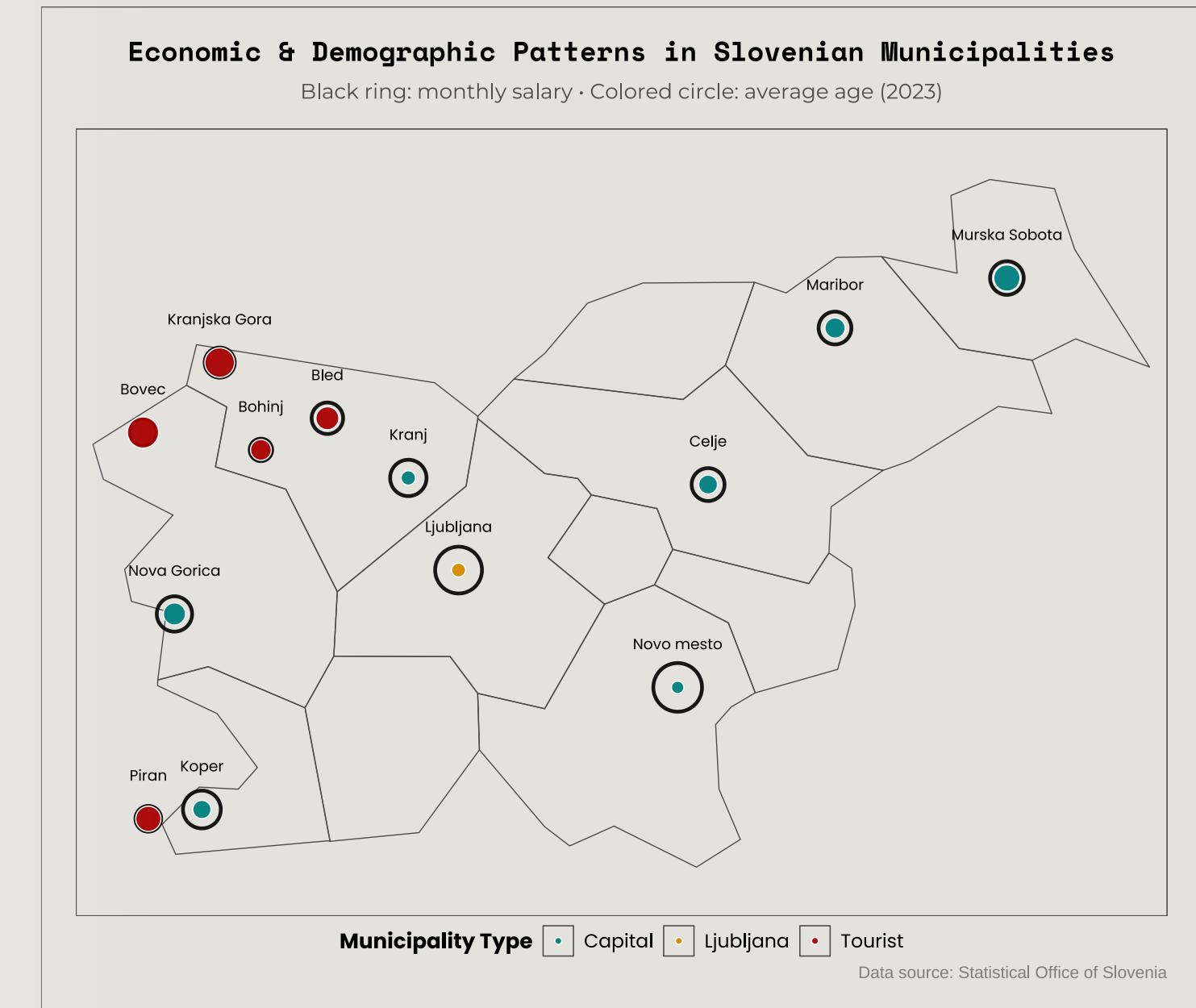
who is affected?

CHART 1: MAP WITH 4 VARIABLES (location, type, age, income)

Tourist spots show a clear pattern:

- Higher average age
- Lower average salaries
- Demographic shifts driven by rising living costs and second-home buyers

Control cities and Ljubljana remain more **balanced**.



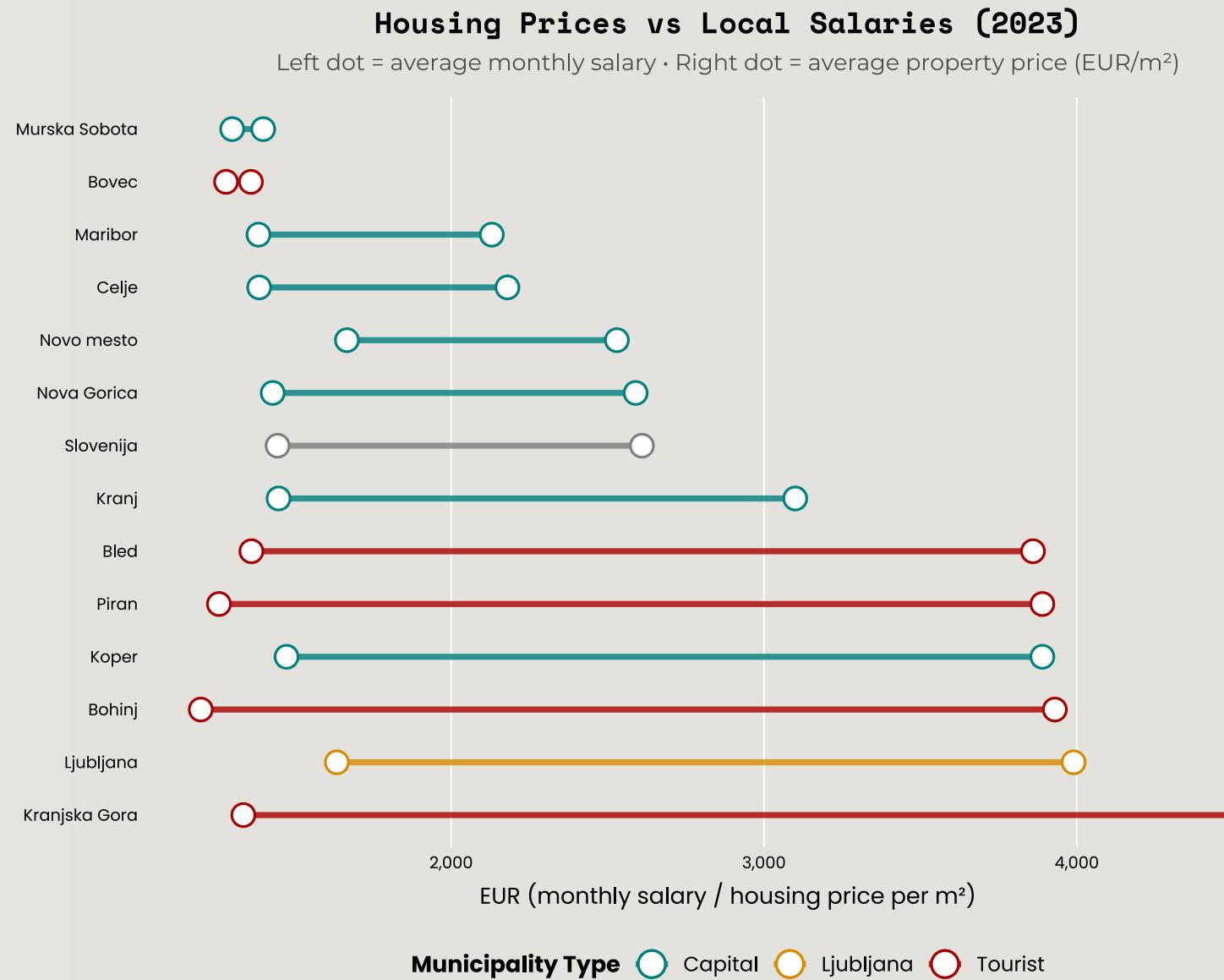
housing prices

CHART 2: DUMBBELL CHART WITH 2 VARIABLES (housing price, income)

In tourism-driven municipalities, property prices have surged far beyond local wages.

Investors and second-home buyers dominate the market.

For many young residents, home ownership is **no longer realistic**.



Data source: Statistical Office of Slovenia

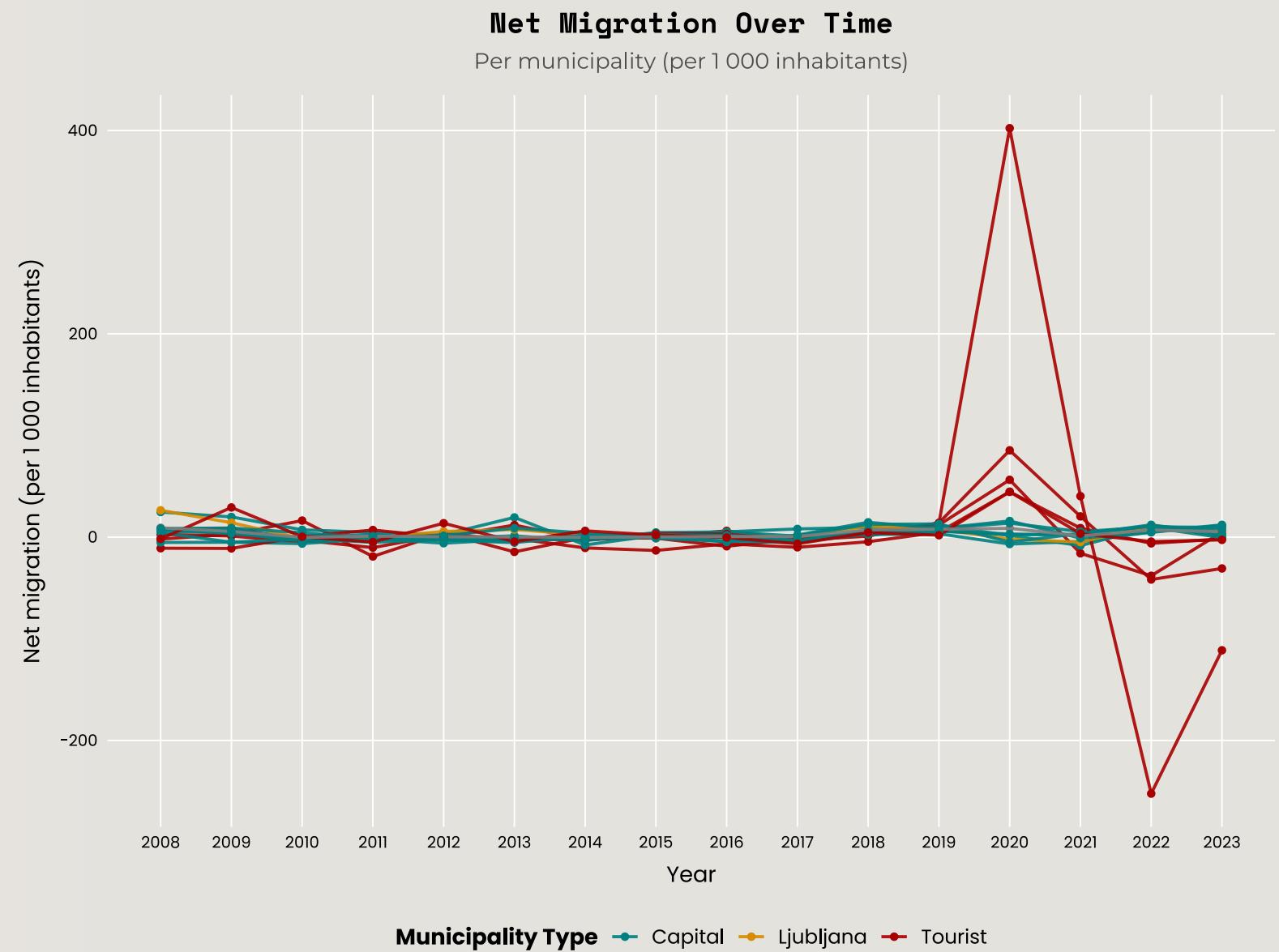
migrations

CHART 3: MULTILINE TIME SERIES CHART (net migration over time)

- x-axis = years
- y-axis = net migration
- multiple lines = municipalities

The COVID-19 pandemic triggered a sharp shift in migration.

Tourist towns saw a spike in newcomers — often **wealthier lifestyle migrants**. Meanwhile, many local families and young people are moving out.



Data source: Statistical Office of Slovenia

design

Color palette:

- #F0F0F0
- #008080
- #D78B00
- #A80000
- #000000



Fonts:

- **Montserrat**
- **Poppins**
 - for readability
- **Space Mono**
 - for accent titles

Design goal: **clean**, clear, data-first storytelling.

Bright and contrast color scheme, appropriate for **magazines** and **social media**.

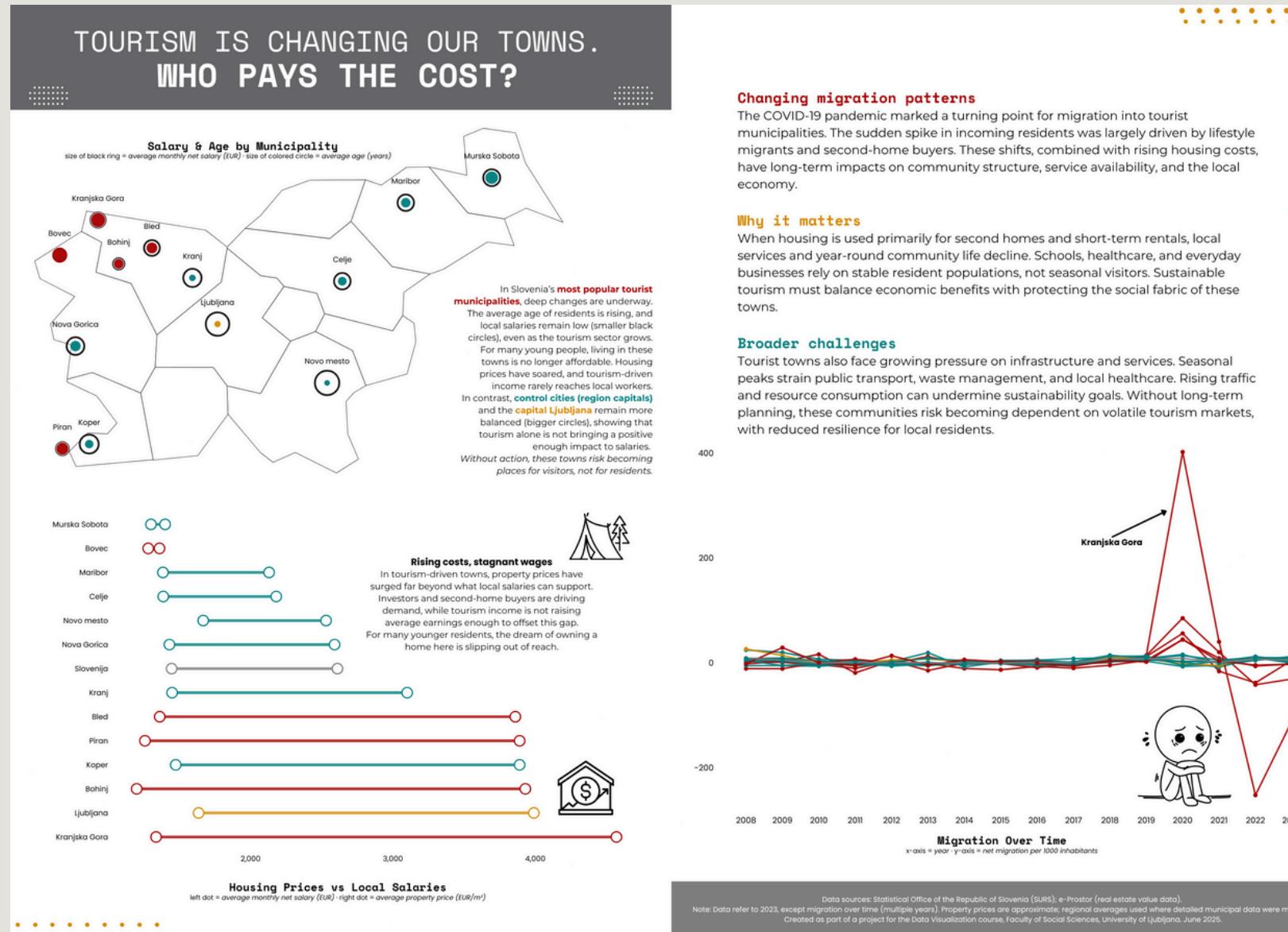
software

Tools used:

- **Excel** → initial data preparation
- **R** (tidyverse, ggplot2) → data processing and charts
- **Canva** → infographic design and presentation
- **ChatGPT** → code assistance

Code and all details available on [GitHub](#).

end product



Infographic combines visual data and textual explanation:

- **Left side** introduces key variables and findings through maps and charts, accompanied by short explanatory texts.
- **Right side** leaves **open visual space** around the migration chart. It invites the reader to pause and reflect on broader implications, beyond what is directly shown in the data.

The goal was to present facts and to spark **critical thinking** about the long-term sustainability of tourism-driven development.

Challenges and dilemmas:

- Selecting appropriate chart types for each variable and story element
 - map with 4 variables: too complex?
- Using absolute vs. **relative** numbers → show differences, gap
- Placing charts visually to support a clear narrative flow
 - (*Idea considered: circular structure, to show interdependence between variables, harder to visualize effectively.*)
- Chart titles placement not optimal?
 - Initial charts lacked titles → feedback: not intuitive enough → added titles
- Not really satisfied with white background, maybe should add dark-mode option or consider different color scheme for bright colors

thank you

THANK YOU FOR YOUR ATTENTION.

QUESTIONS?