Czech economy analysis

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Datasets

- Consumer price index
- Industry production index
- Construction production index
- Transport, retail and services revenues index

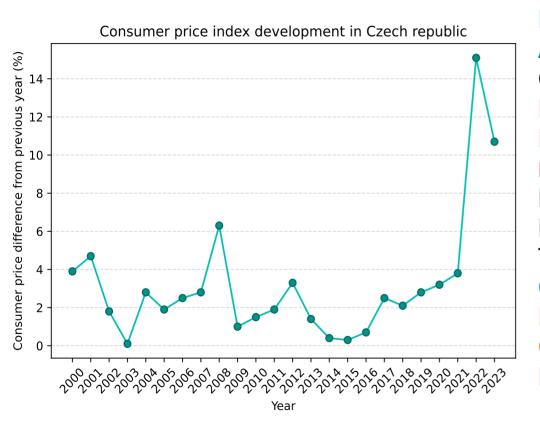
Different index types

- Average annual index value (12 month avg, previous 12 month avg)
- Index compared with the corresponding month of previous year
- Index compared with preceding month
- Index compared to base period (currently 2021)

Questions

- Consumer price index overall, different areas + explanations
- Covid19 influence on CPI, construction, industry and retail

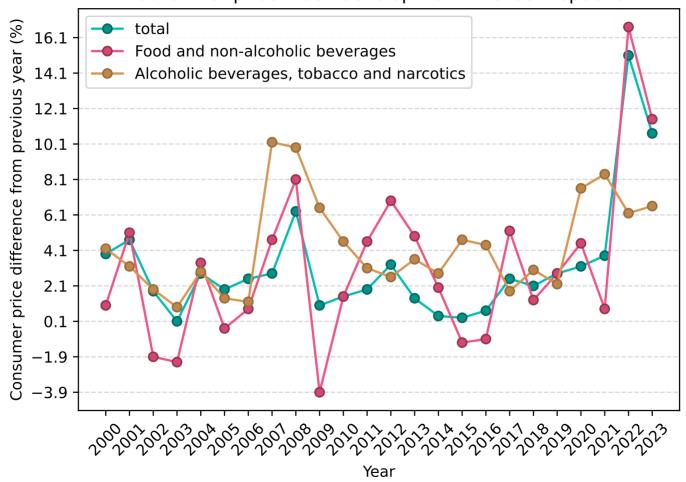
Consumer price index



Food and non-alcoholic beverages, Alcoholic beverages, tobacco and narcotics Clothing and footwear, Housing, water, energy, fuel, Furniture, household maintenance and repairs, Education, Health, Transport, Communication services Recreation and culture, Catering and accommodation, Postal services and telecommunication,

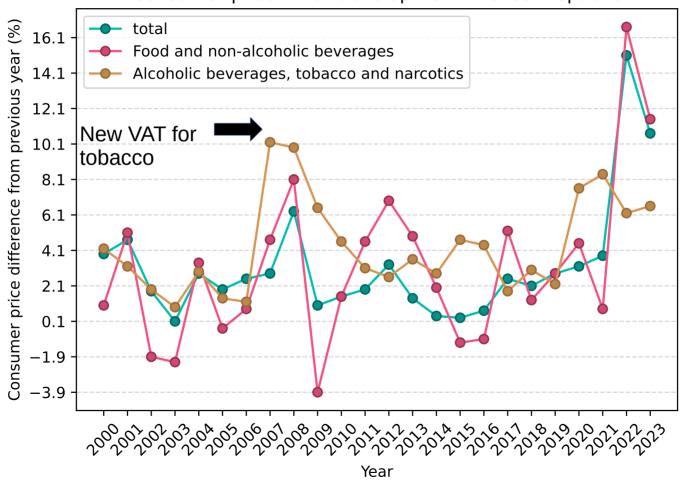
Food and beverages





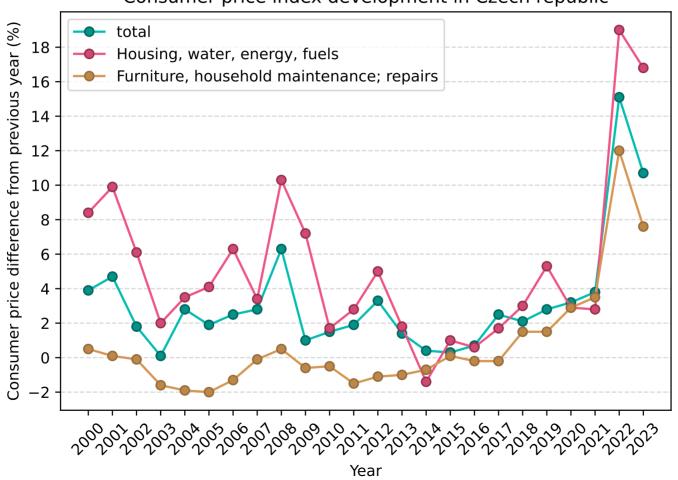
Food and beverages



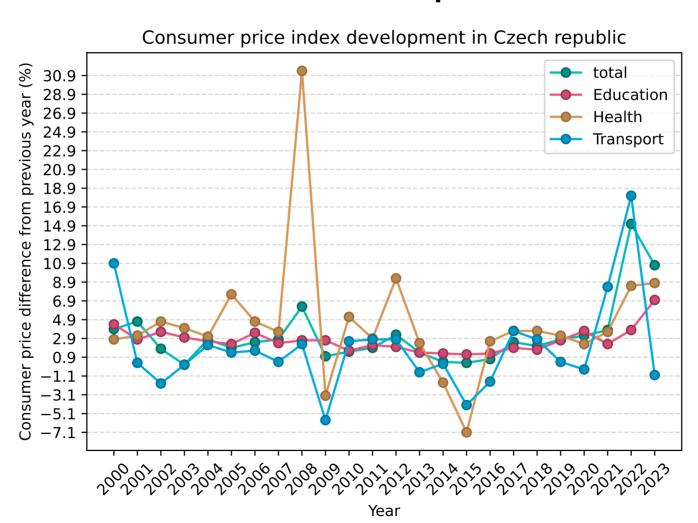


Housing



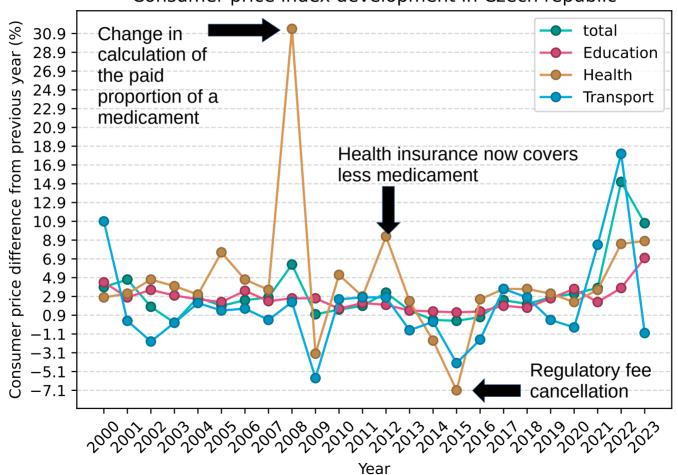


Education, health and transport



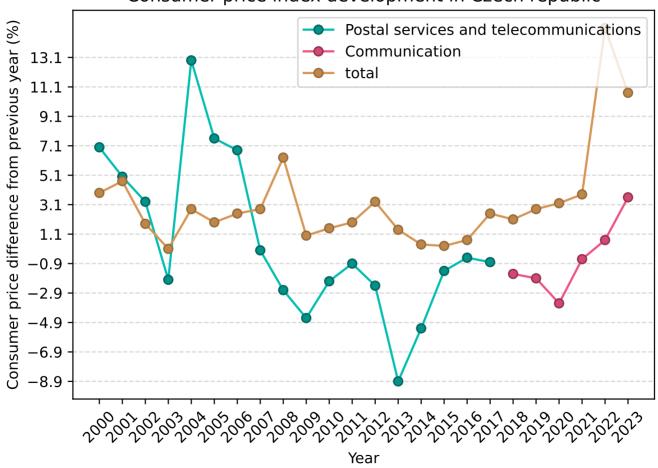
Education, health and transport





Postal services, telecommunication

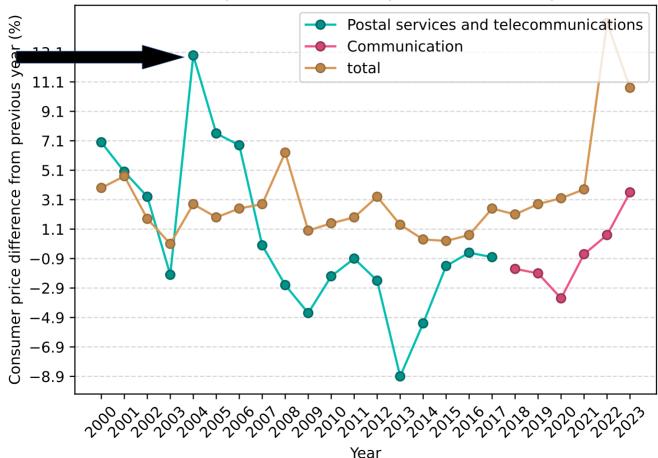
Consumer price index development in Czech republic



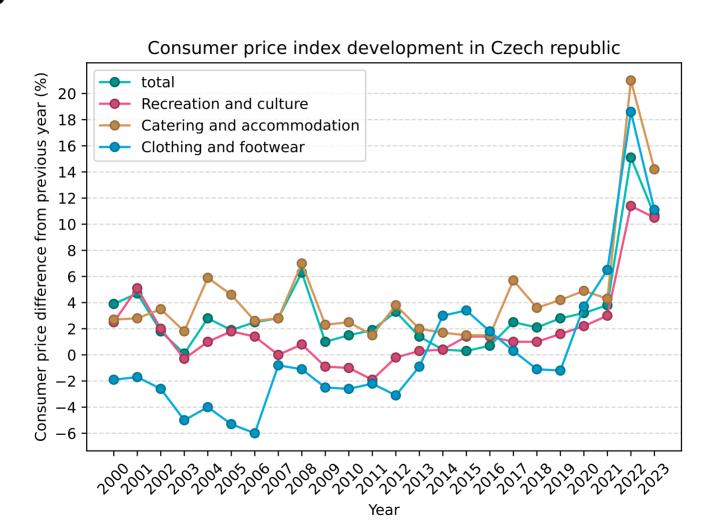
Postal services, telecommunication

Consumer price index development in Czech republic

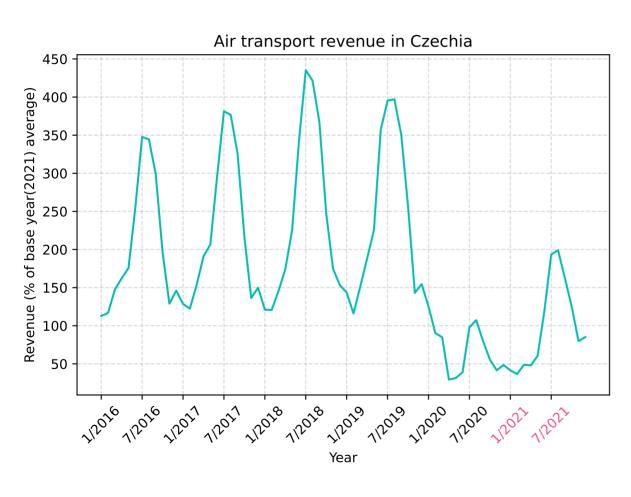
VAT rate change 5% → 22%



Others



Working with seasonal data



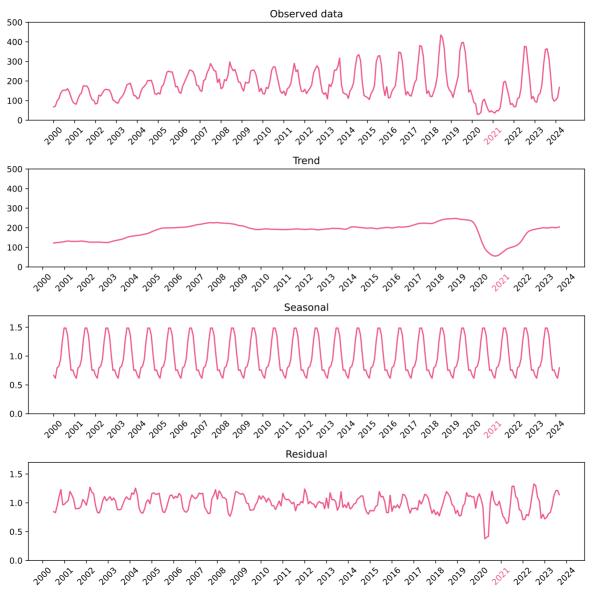
$$Y_t = S_t * T_t * R_t$$

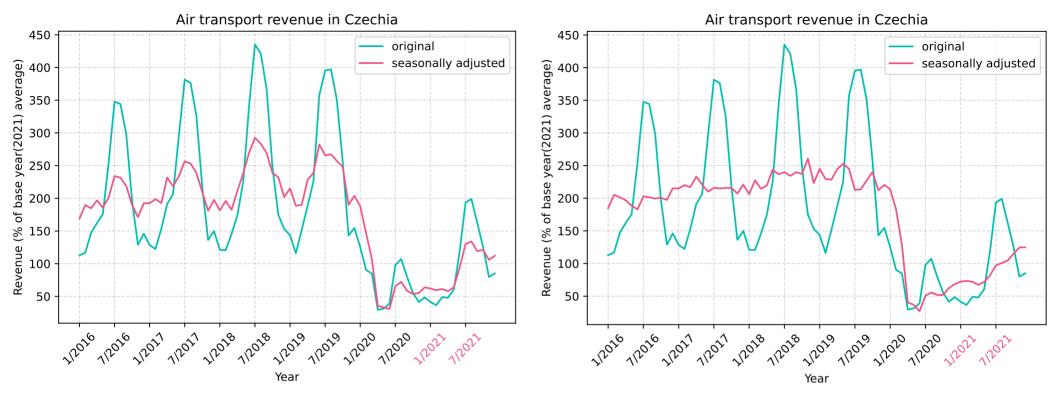
Yt ... data

St ... seasonal component

Tt... trend cycle component

Rt ... remained component





Adjustment using statsmodels.tsa.seasonal_decompose

Adjustment by Czech Statistical Office

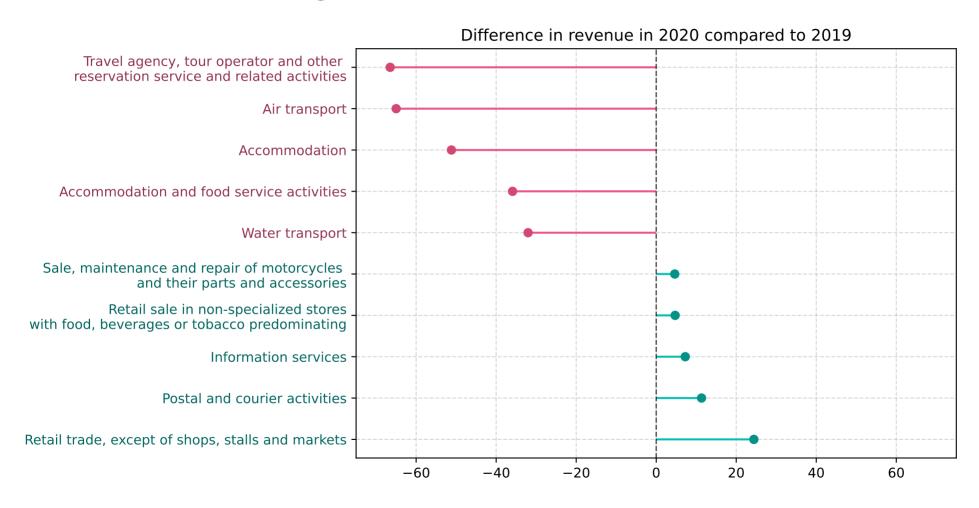
$$y_t = y_t / S_t$$

Revenues during COVID19

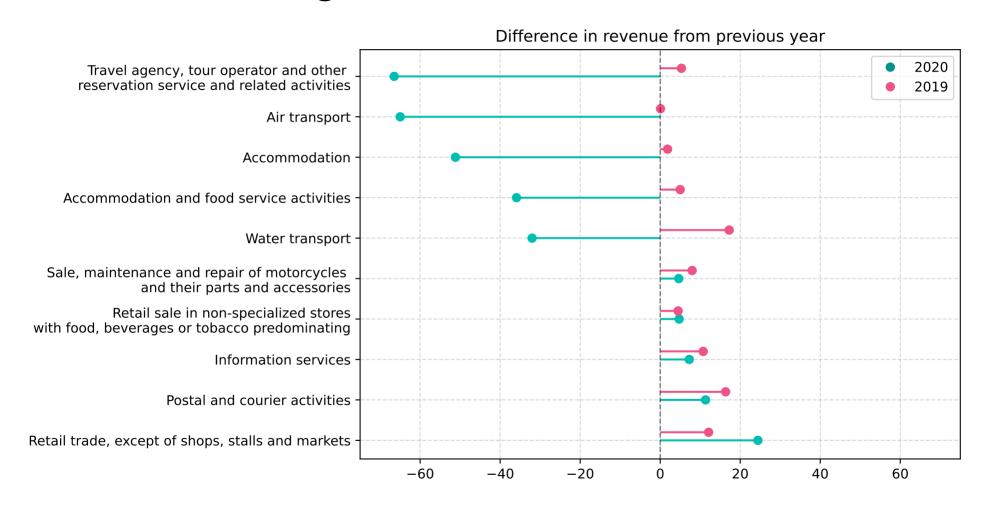
Which sectors suffered the most?

Were there any sectors that increased their revenue?

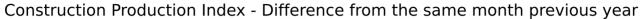
Revenues during COVID19



Revenues during COVID19



What about construction and industry?



130

- 125

- 120

- 115

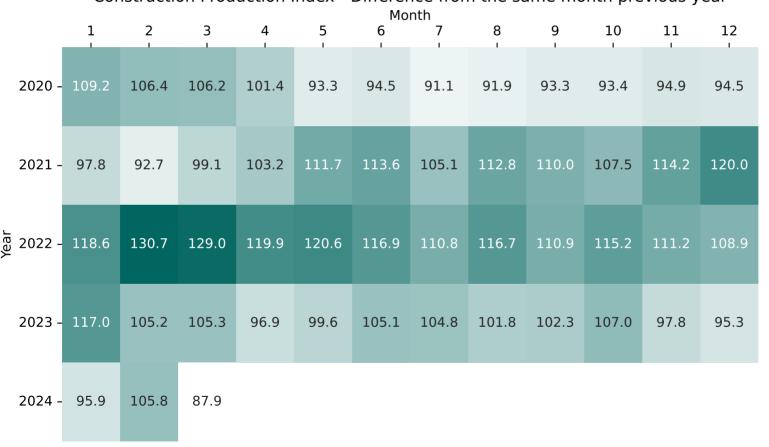
- 110

- 105

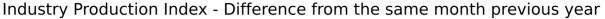
- 100

- 95

- 90



What about construction and industry?



- 140

- 130

- 120

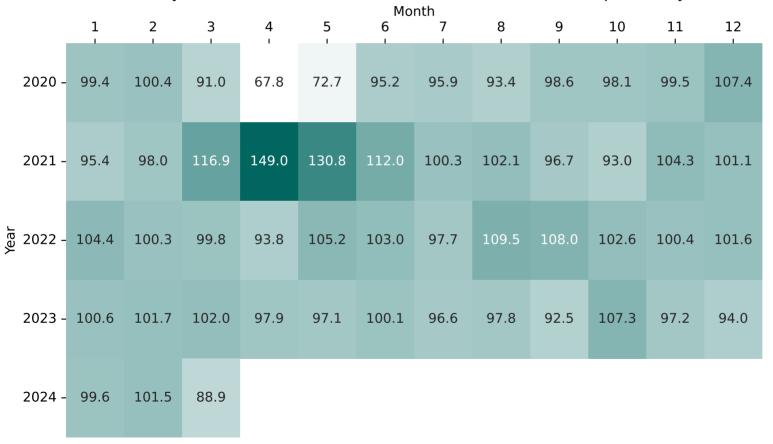
- 110

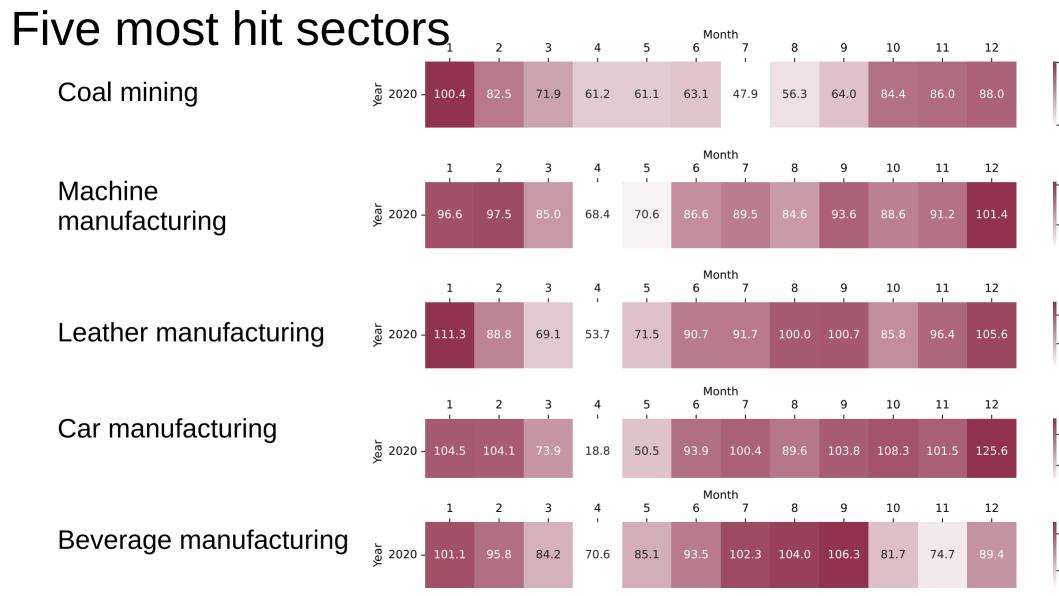
- 100

- 90

- 80

- 70





Thank you for your attention