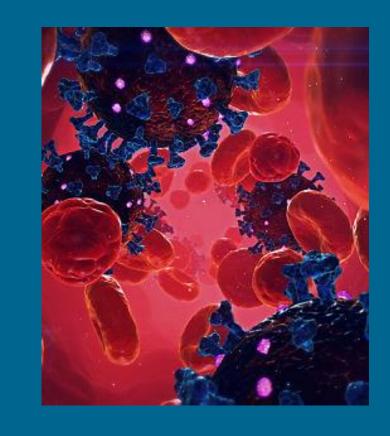
The economic impact of cancer and the benefits of modern cancer care

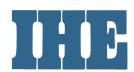
Dr. Thomas Hofmarcher

Health Economist at the Swedish Institute for Health Economics (IHE)

April 25, 2022

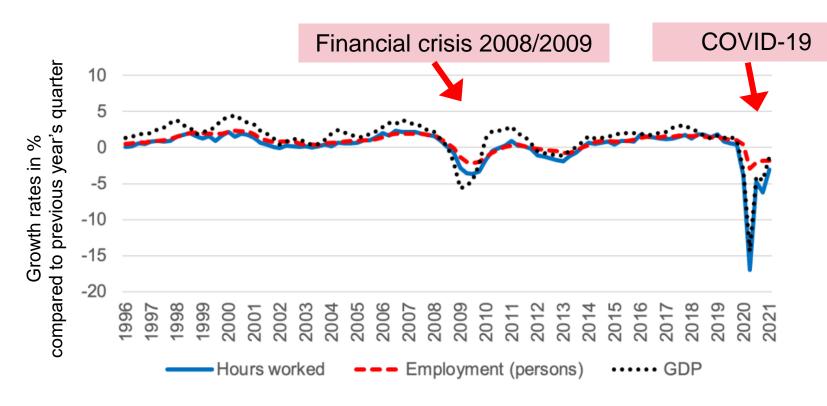
Disclosures: none.





COVID-19's effects on the economy

GDP growth and labor market performance in the Euro area



We already knew:

 Sick people are less productive than healthy people

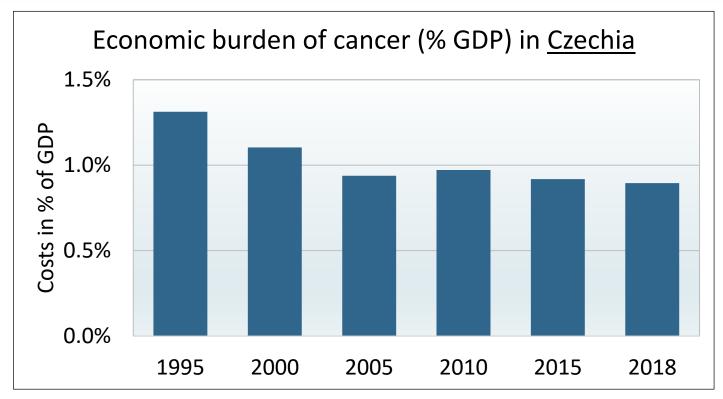
Key learning from COVID:

 Diseases have profound impacts on the economy

Notes: Quarterly data. Growth rates in refer to growth relative to the same quarter of the previous year. Source: Eurostat via https://voxeu.org/article/euro-area-s-covid-19-recession



Cancer's effects on the economy



Notes: Economic burden is the sum of health care costs spent on cancer and indirect costs of cancer. Indirect costs are productivity loss from premature mortality and sickness absence and permanent incapacity/disability of working-age cancer patients (15-64 years).

Source: Jönsson, et al. (2016) "The cost and burden of cancer in the European Union 1995-2014". Eur J Canc. 2016; 66: 162-170. and Hofmarcher, et al. (2020) "The cost of cancer in Europe 2018." Eur J Cancer;129:41-49.

Economic burden of cancer

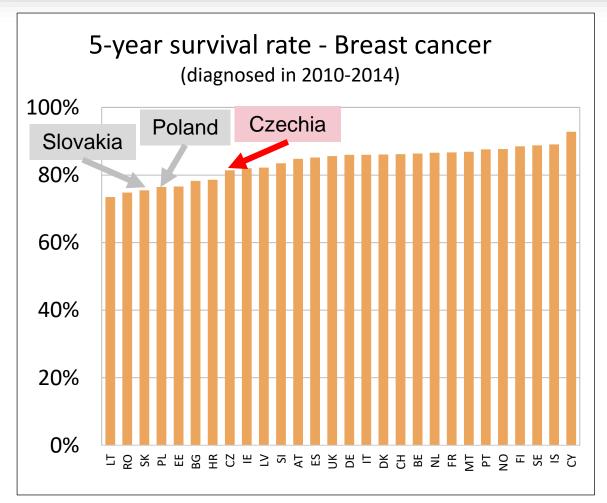
- Health care costs
- Indirect costs from lost productivity (sick leave, early retirement, premature death)

We have had a "cancer pandemic" for decades

- Annual economic impact is smaller than for COVID-19
- But we feel the economic impact every single year
- We learned to live with the impact of cancer!



Survival of Czech cancer patients is below EU-27 average



Source: Allemani, et al. (2018) CONCORD-3 study. Lancet. 391(10125):1023-1075.



Czechia in the EU-27

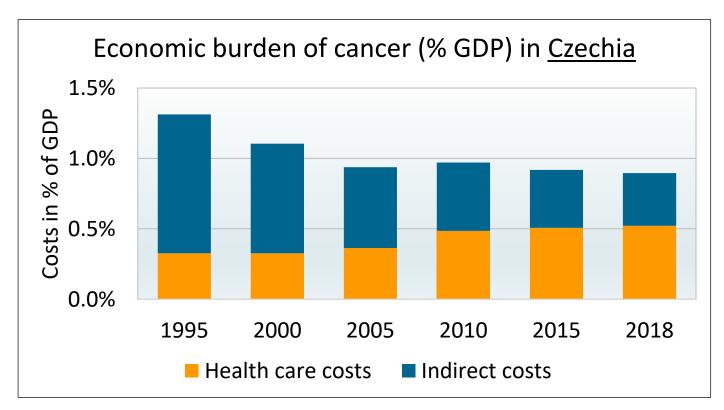
- **Prevention** (in 2019; Source: Eurostat/WHO)
 - Smoking rate (12th highest)
 - HPV vaccination rate (no data!)



- Breast cancer (7th highest)
- Cervical cancer (1st highest!)
- Colorectal cancer (6th highest)
- Radiation therapy (in 2021, Source: IAEA)
 - Machines per capita (15th highest)
- Cancer medicines (in 2022, Source: EFPIA)
 - Massive transformation since 2000 →
 "personalized medicine" through targeted therapies and immunotherapy
 - Availability of new medicines (12th highest)



Economic implications of progress in cancer care



Notes: Indirect costs are productivity loss from premature mortality and sickness absence and permanent incapacity/disability of working-age cancer patients (15-64 years).

Source: Jönsson, et al. (2016) "The cost and burden of cancer in the European Union 1995-2014". Eur J Canc. 2016; 66: 162-170. and Hofmarcher, et al. (2020) "The cost of cancer in Europe 2018." Eur J Cancer;129:41-49.

- Health care spending (in Kč)
 on cancer care has increased
 a lot in the past decades!
- Patient outcomes have also improved during the same time. This has led to decreases in indirect costs!
- → Danger: "Silo mentality"

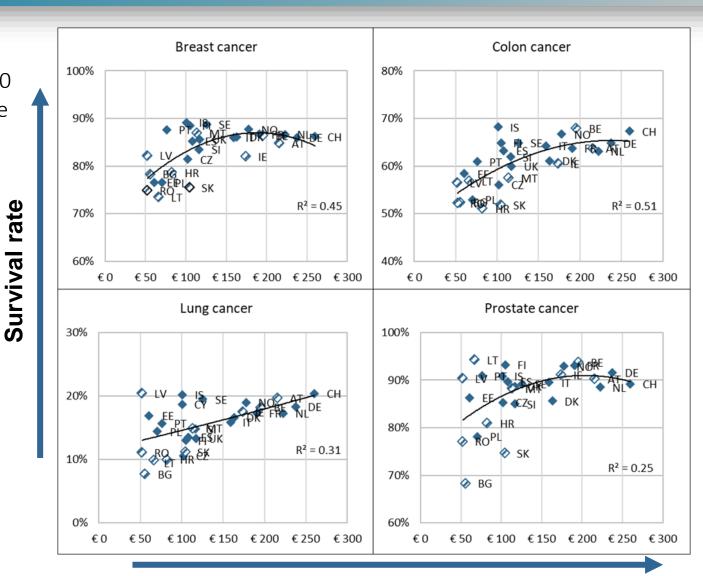
 If you only focus on the "health care budget", you will miss the benefits accruing in other parts of the social security system (e.g., sickness benefits, early retirement) and overall economic activity (tax revenue)



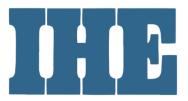
Positive association between spending on cancer care & survival

Cancer expenditure (€ per capita, PPP) in 2010 and 5-year survival rate (in %) in 2010–2014

- More spending → better outcomes
- Spending on what?
 - Evidence-based interventions along the whole patient pathway
 - Cost-effective interventions







Thank you!

Find out more about IHE's research: https://ihe.se/en/

Contact details: thomas.hofmarcher@ihe.se