



GLOBAL INNOVATION INDEX 2019

Creating Healthy Lives—The Future of Medical Innovation

PROTECTION OF INDUSTRIAL PROPERTY RIGHTS IN EUROPE

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Why the Global Innovation Index?

Helps place innovation firmly on the policy map

Leaders incorporate innovation and rankings as part of their economic policy strategies.

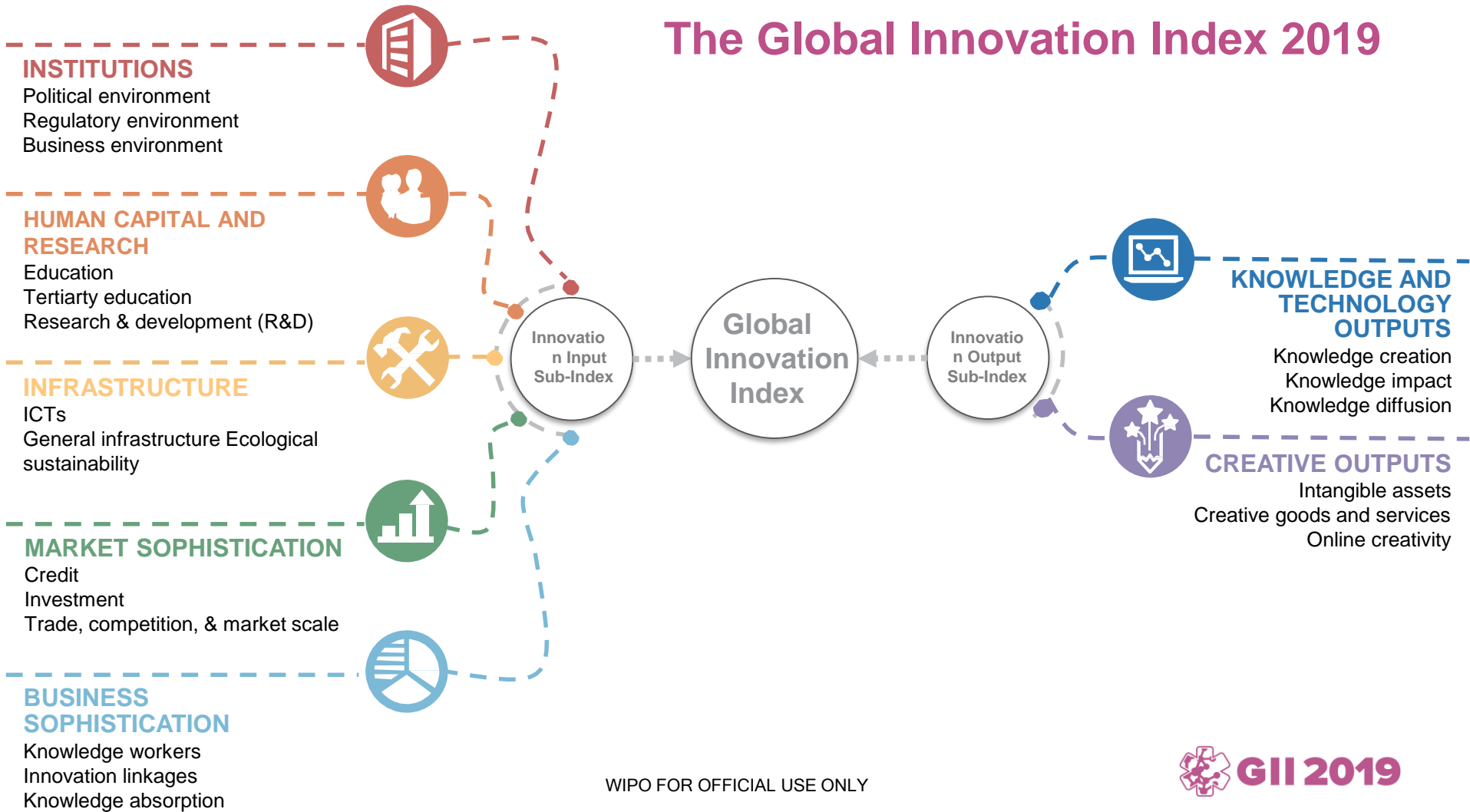
Allows economies to assess national innovation performance.

Economies invest resources to analyze results and metrics to design appropriate policy reactions

Provides strong impetus for economies to prioritize and collect innovation metrics.

Experimenting with new data and evaluating existing metrics is shaping the innovation measurement agenda.

The Global Innovation Index 2019



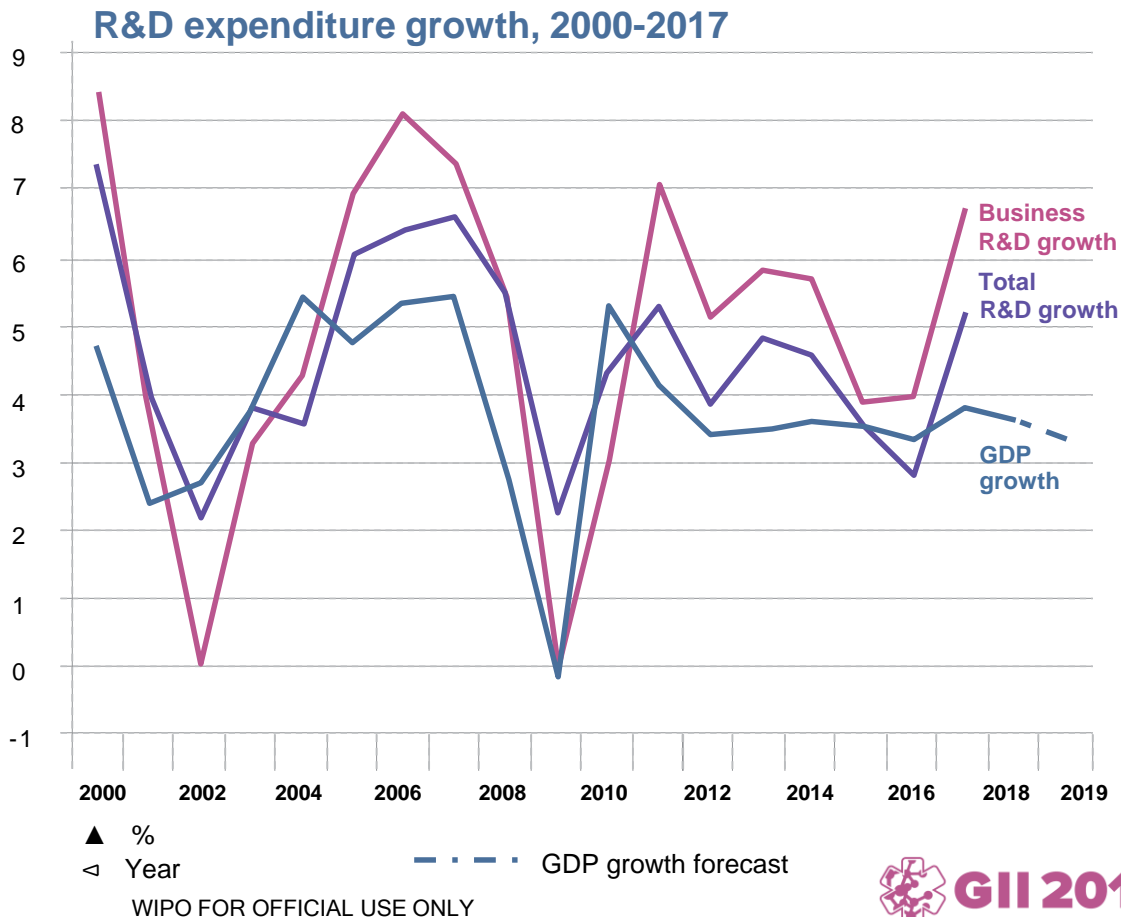
Key Messages of the Global Innovation Index 2019

1: Amid economic slowdown, innovation is blossoming around the world

- Innovation now on the map of developed and developing economies worldwide
- R&D expenditures growth faster than the global economy.
 - More than doubling between 1996 and 2017

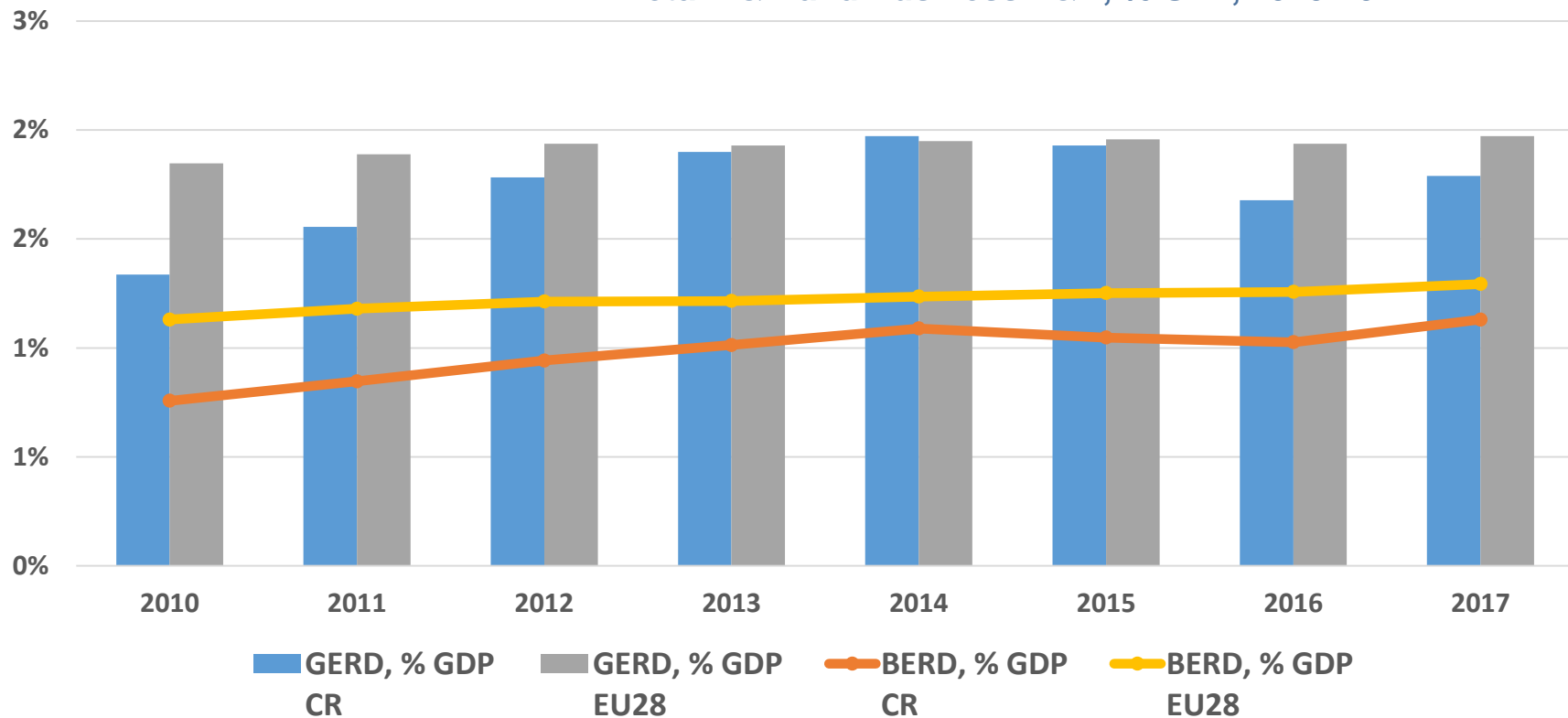
Yet new obstacles = risks

- Public R&D expenditures growing slowly or not at all.
- Increased protectionism.



Czech Republic is rapidly catching up with EU's R&D spending

Total R&D and Business R&D, % GDP, 2010-2017



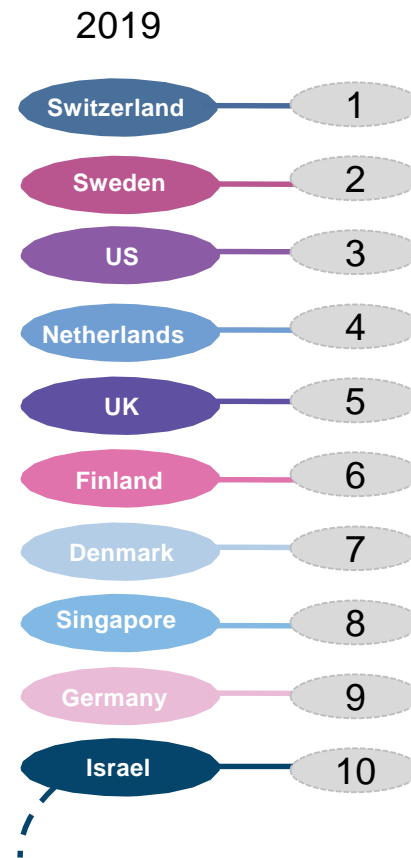
2: Europe making a strong showing in top GII ranks

- Stable top echelon leading.
- Europe makes a stunning appearance on the GII

Some middle-income economies are on rise

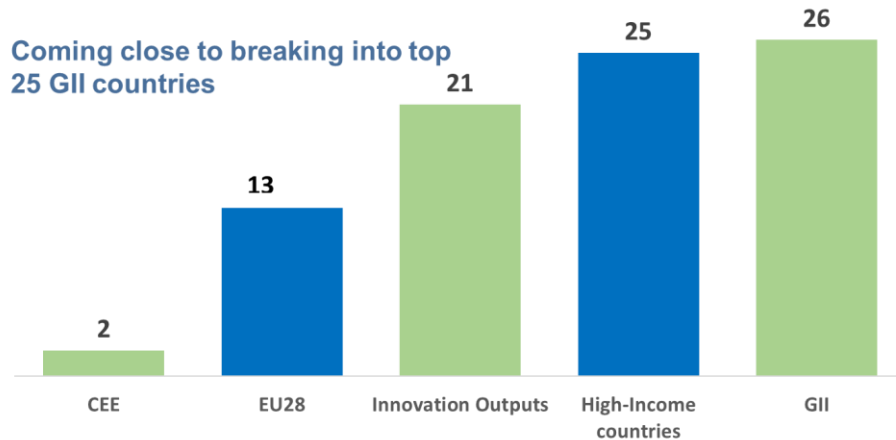
- China (14) moves into the top 15.
- Viet Nam (42) and Thailand (43) closer to the top 40.
- India (52) and the Philippines (54) getting closer to top 50.

Movement in the GII, top 10, 2018 -2019



Czech Republic in the GII 2019

- Czech Republic positions **26th economy in the GII** (moving up one position since last year).



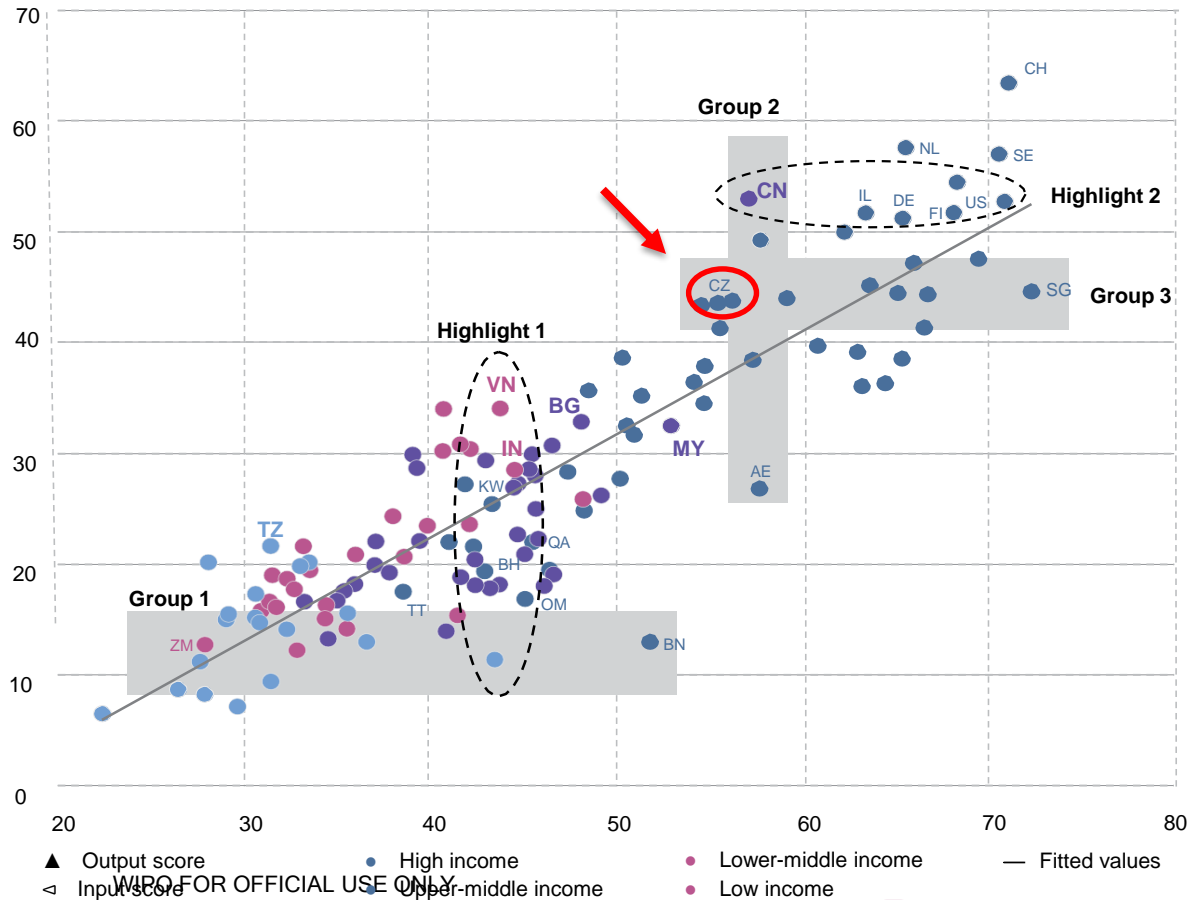
- Czech Republic is **Innovation leader in Central and Eastern Europe** – it ranks 2nd in the GII and 2nd in the Quality of Innovation.

11. Belgium
12. Estonia
- 13. Czech Republic**
14. Malta
15. Spain
16. Italy
17. Slovenia
18. Portugal
19. Hungary
20. Latvia

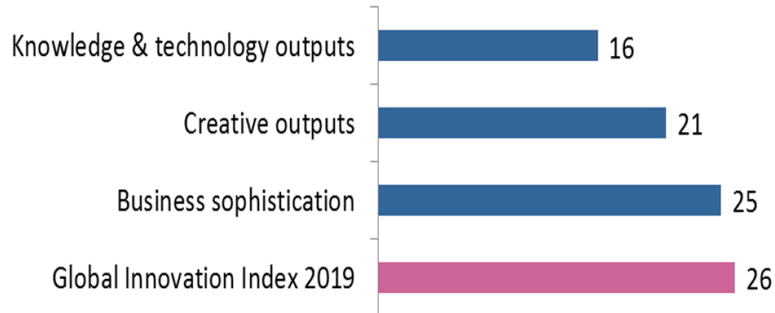
3: Some economies get more for their innovation investments than others

- A divide also exists when translating inputs into outputs.
- This happens even among high-income economies.
- **Czech Republic is highly efficient in translating its Innovation Investments into Innovation Outputs.**

Innovation input/output performance by income group, 2019



Czech Republic in the GII 2019



- **Czech Republic ranks 1st in the world:**

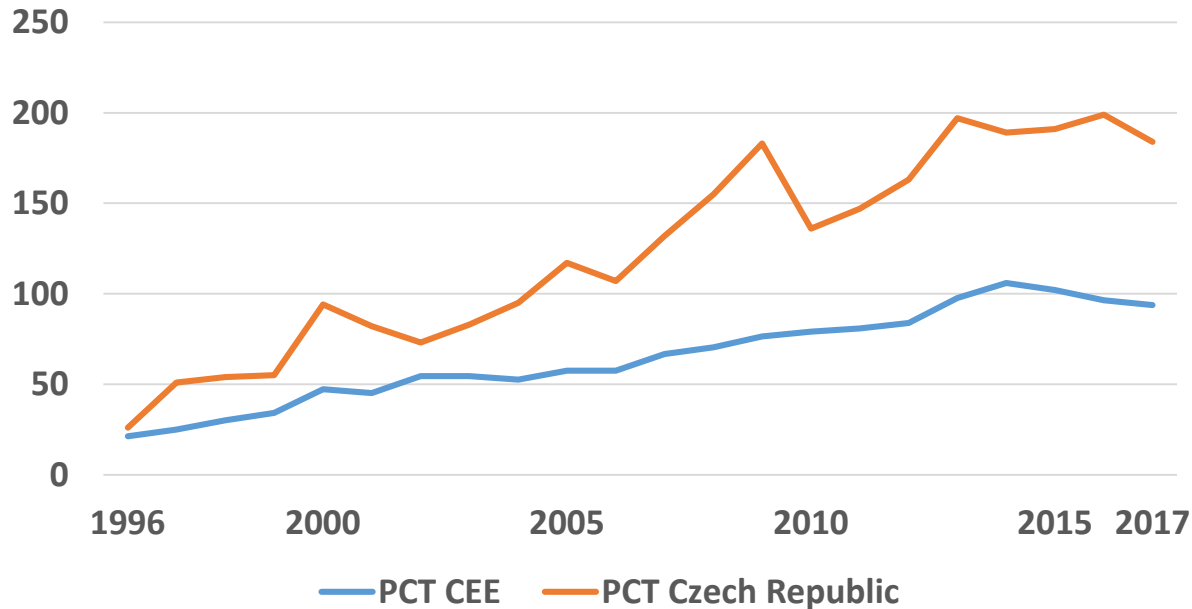
- High-tech net exports (1st)
- Creative good exports (1st)

- Czech Republic performs exceptionally w

- **ISO 9001 quality certificates (3rd)**
- **High- & medium-high-tech manufactures (5th)**
- **Utility models (6th)**

Czech Republic: PCT filings, 1995-2017

95% National patent applications are filed by residents



Czech Republic features rapid and constant growth in international PCT patent filings, well surpassing CEE trend.

Major technological fields:
Pharma & Chemistry, Medical technology, and Transport.

Czech Republic also has constant trend in exceeding CEE average in National patent filings.

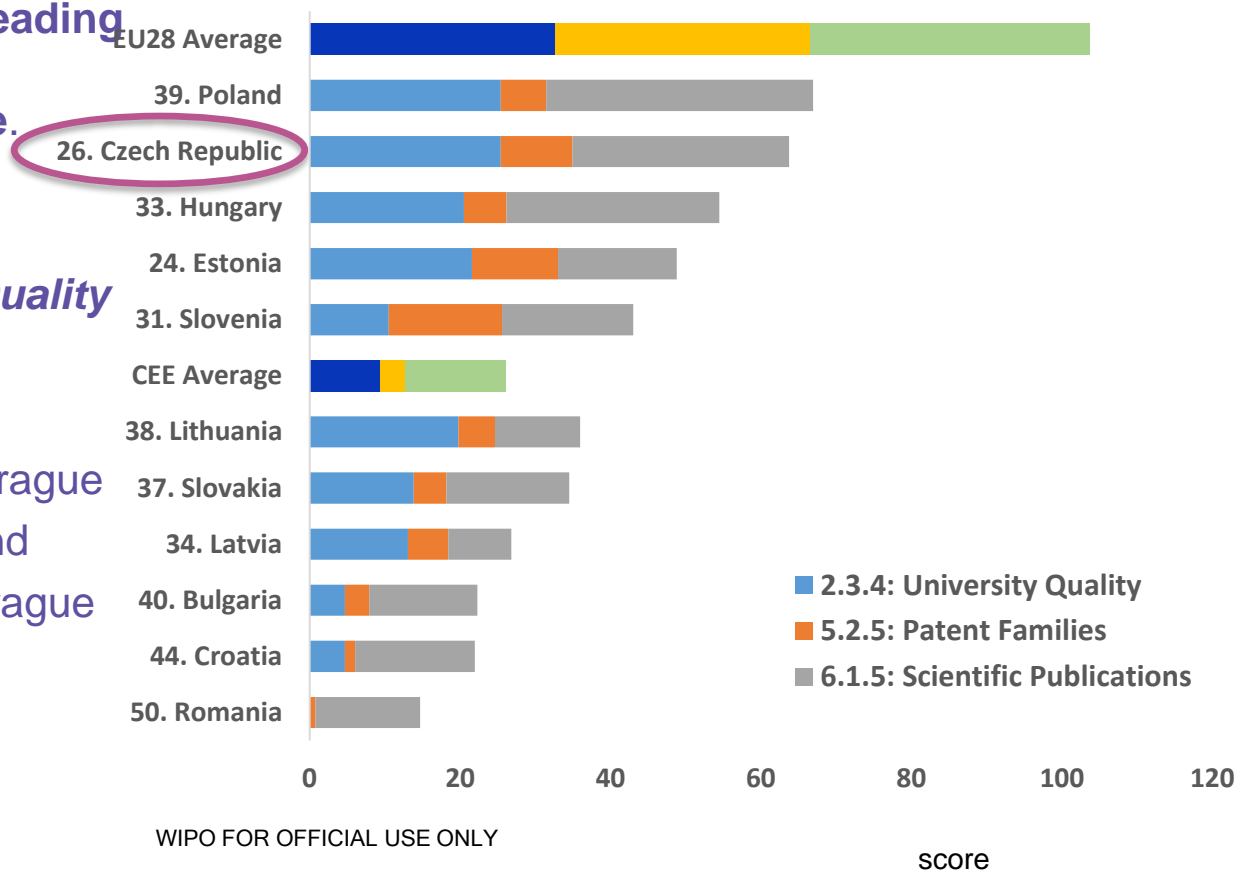
4: Shifting focus from innovation quantity to innovation quality remains a priority

- Czech Republic is among leading economies for Quality of in Central and Eastern Europe.

- scores highly in *Scientific publications + University Quality*

- ❖ Charles University
- ❖ Czech Technical University Prague
- ❖ University of Life Sciences and
- ❖ University of Economics in Prague

Quality of innovation: Central and Eastern Europe, 2019



5: Most top S&T clusters are in the U.S., China, and Europe

- The U.S. host the largest number of clusters (26).
- China holds the second-largest number (18).
- Europe ranks high
- European Innovation Scoreboard: Prague a regional pocket of excellence'

Top cluster of economies or cross-border regions within the top 20, 2019

Rank	Cluster name	Economy(ies)
1	Tokyo-Yokohama	Japan
2	Shenzhen-Hong Kong	China/Hong Kong, China
3	Seoul	Republic of Korea
4	Beijing	China
5	San Jose-San Francisco, CA	United States of America
9	Paris	France
15	London	United Kingdom
18	Amsterdam-Rotterdam	The Netherlands
20	Cologne	Germany

Brazil, India, Iran, the Russian Federation, and Turkey also in the top 100

Conclusion

Historic chance

- Czech Republic has opportunity to reinforce its innovative potential and place itself among Europe's innovation leaders by 2030.

Implementing the strategies with measurable targets and staying the course

- *Innovation Strategy of the Czech Republic 2019-2030* a crucial plan and guiding mechanism to promote science, research and innovation.

Leveraging IP to attain socio-economic development goals

Celebrating innovation of private sector and individuals