



# Impact of Globalisation on the Forestry Industry: Application of Comparativeness Analyses

Ján Parobek, Katarína Slašťanová

WoodEMA 2020 & ICWST 2020 SUSTAINABILITY OF FOREST-BASED INDUSTRIES IN THE GLOBAL ECONOMY Vinkovci, Croatia, September 28<sup>th</sup>- 30<sup>th</sup> 2020





Competitiveness

- competitiveness as a driving force of the economy
- measuring industrial international competitiveness
- the Slovak wood processing industry
- competitiveness indicators





#### Methodology

Trade Specialisation Index

$$TSI_{j}^{A} = \frac{X_{j}^{A} - M_{j}^{A}}{X_{j}^{A} + M_{j}^{A}}$$
 (1)

where:

 $X_j^A$  - country A's export of product j (sawnwood, wood base panels)  $M_j^A$  - country A's import of product j (sawnwood, wood base panels)





## Methodology

Export/Import Ratio

 $EIR_{j}^{A} = \frac{X_{j}^{A}}{M_{j}^{A}} * 100$  (2)

The higher the value of the ratio the — more international trade ccompetitiveness

A positive value of this index — international trade competitiveness for a particular product

A negative value of the index — > no international trade competitiveness



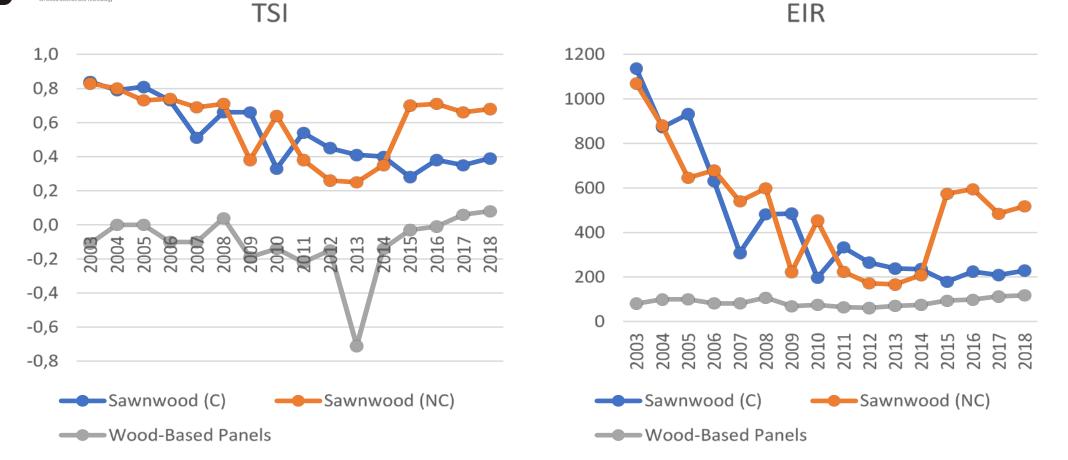


# Results

- The fluctuating development of values was caused by several factors
- Impact on accidental felling and on the wood processing industries
- In 2018, data describes the higher level of coniferous sawnwood and wood based panels export
- Import also represents one of the highest values in 2008 and 2018
- In 2018 the share of coniferous sawnwood import reached 43.8 % of exports
- In 2018 the export of wood based panels reached almost 90 % compare with year 2008
- Sawnwood export was mostly realized to Hungary, Italy, the Czech Republic and Austria (64% of the total value of the sawnwood export.)







Graph 1 Values of the EIR and TSI indexes in the period from 2003 to 2018

WoodEMA 2020 & ICWST 2020 SUSTAINABILITY OF FOREST-BASED INDUSTRIES IN THE GLOBAL ECONOMY Vinkovci, Croatia, September 28<sup>th</sup>- 30<sup>th</sup> 2020





## Conclusion

- TSI and EIR indexes were calculated from the obtained data to describe the development of competitiveness in both sectors in the period from 2003 to 2018
- Positive values of indicators mean the predominance of exports over imports of analysed commodities (comparative advantage)
- Veneers (mostly from non-coniferous), OSB and fibreboards represent a comparative disadvantage





#### Conclusion

- The higher share of sawnwood exports over imports represents a comparative advantage
- From the terms of sustainable development and support of the national economy we cannot consider it as a positive effect
- However, it is necessary to increase the production of products with higher added value even at the cost of a comparative disadvantage
- By increasing the degree of finalization and increasing the capacity of the forest industry, we will achieve an increase in the production of high-quality commodities





#### Thank you for your attention!

Associate Professor Ján Parobek, PhD. Msc. Katarína Slašťanová Department of Marketing, Trade and World Forestry Technical University in Zvolen Masarykova 24, 960 53 Zvolen, Slovakia e-mail: parobek@vsld.tuzvo.sk

WoodEMA 2020 & ICWST 2020 SUSTAINABILITY OF FOREST-BASED INDUSTRIES IN THE GLOBAL ECONOMY Vinkovci, Croatia, September 28<sup>th</sup>- 30<sup>th</sup> 2020