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26/10/2023

Forest certification and economic valorization in Europe: main drivers and limitations

Corticeiro S., Tomé M., Vieira H



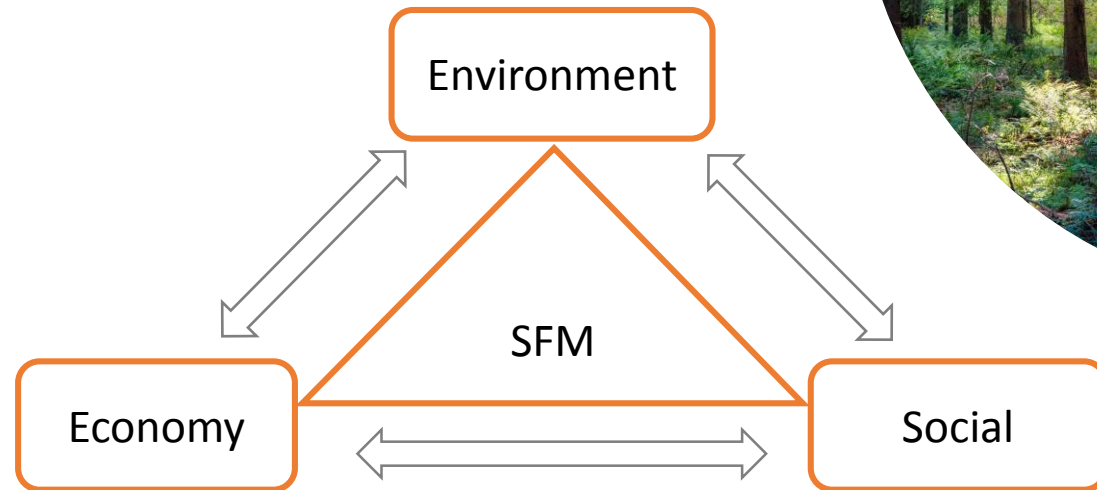


Forest certification

+ **Forest certification** - to promote sustainable forest management (SFM) and to reduce the negative impacts of exploiting forests ecosystems.

++ **Sustainable management** ensure that:

- forests continue to provide a wide range of environmental, social, and economic benefits
- the investment in forests has the potential to provide financial returns





Main aims:

- To understand if forest certification can foster investment in forests
- To identify key factors influencing the relationship between forest certification and investment or economic valorization of the forest-related markets.





Data search and extraction

Forest and certified forest areas

- Total forest area and total certified forest area for each European country - FAO.
- The forest area certified by PEFC and FSC – PEFC AND FSC institutional sites.

Economic indicators

- Intermediate consumption (million euros) - Eurostat
- Gross value added (GVA) (million euros) - Eurostat
- Outputs from the forest sector and related secondary activities (million euros) - Eurostat

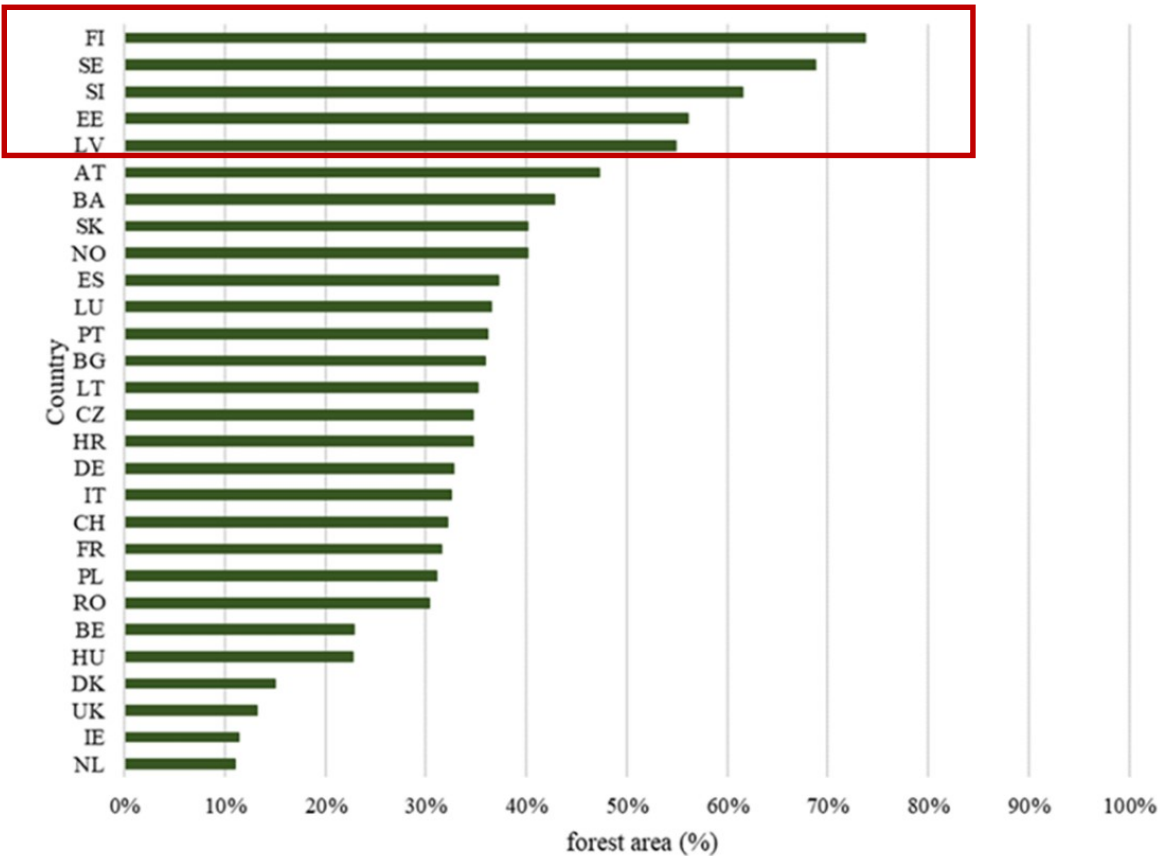


Economic indicators were multiplied by the ratio of area certified within each country.

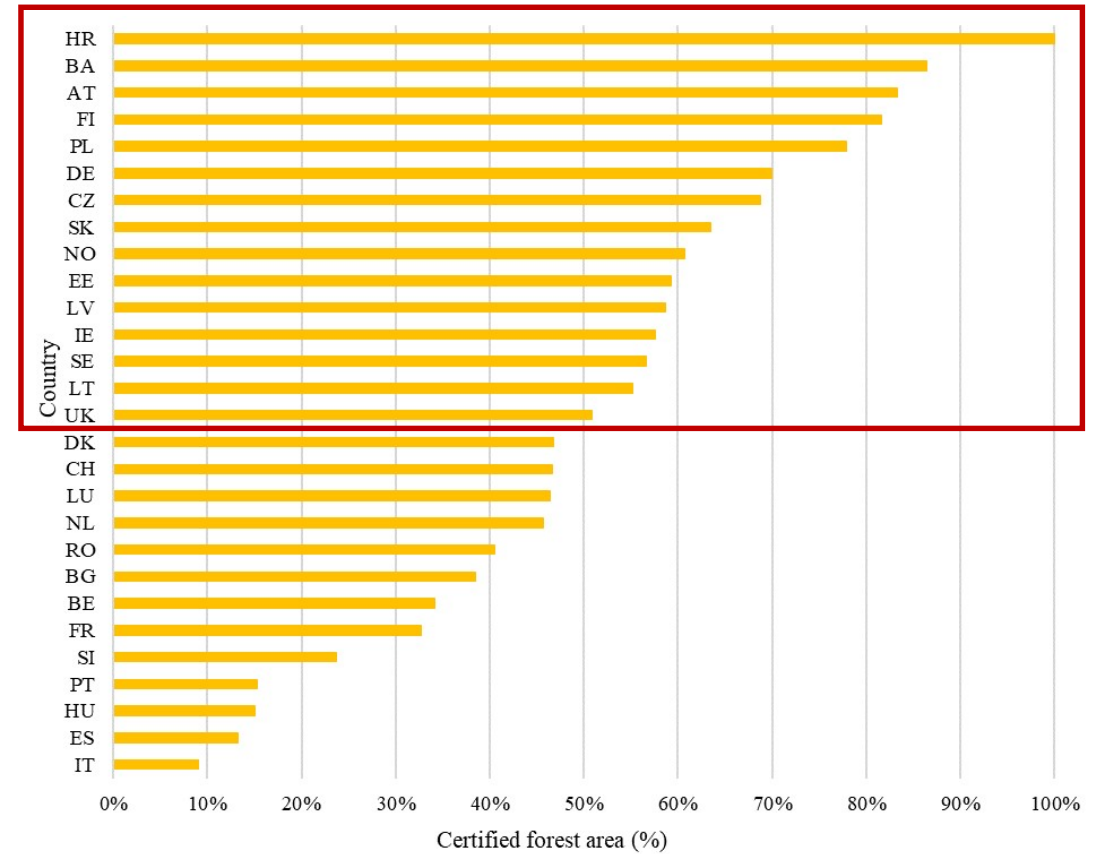


Forest area and certified forest area by country in Europe

Forest area (%)



Certified forest area (%)

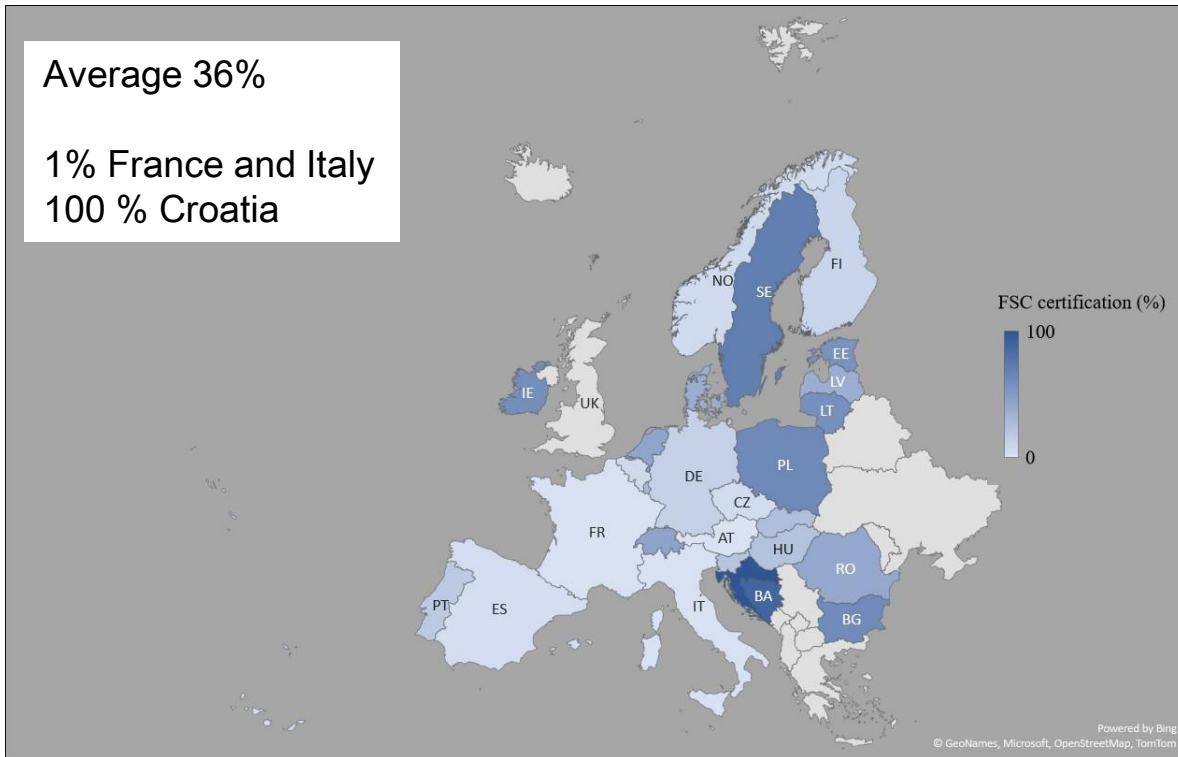


Source of the original datasets (FAO 2020b).

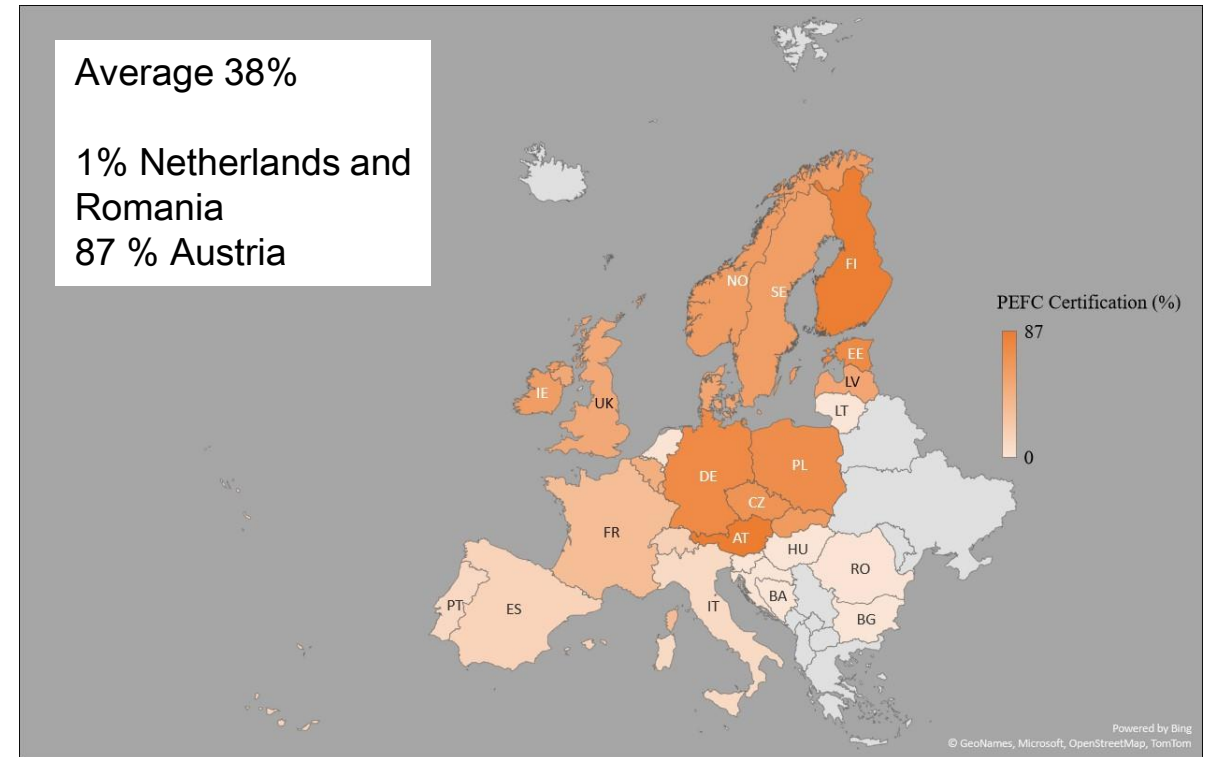


Certified forest area by country in Europe

FSC certified forest area

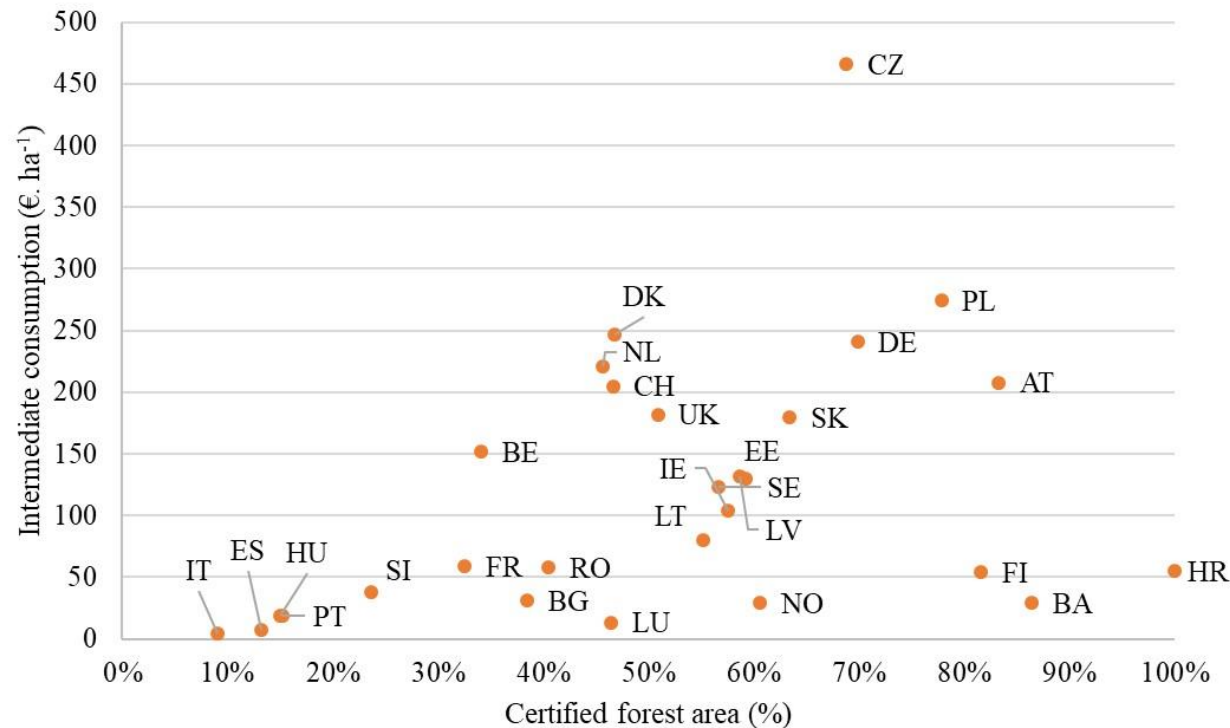


PEFC certified forest area





Certified forest area vs Intermediate consumption



Relation between the intermediate consumption in 2020 by country, in euros per ha, and the respective certified forest area for the European countries

Tendency:

More certified forest area higher costs.

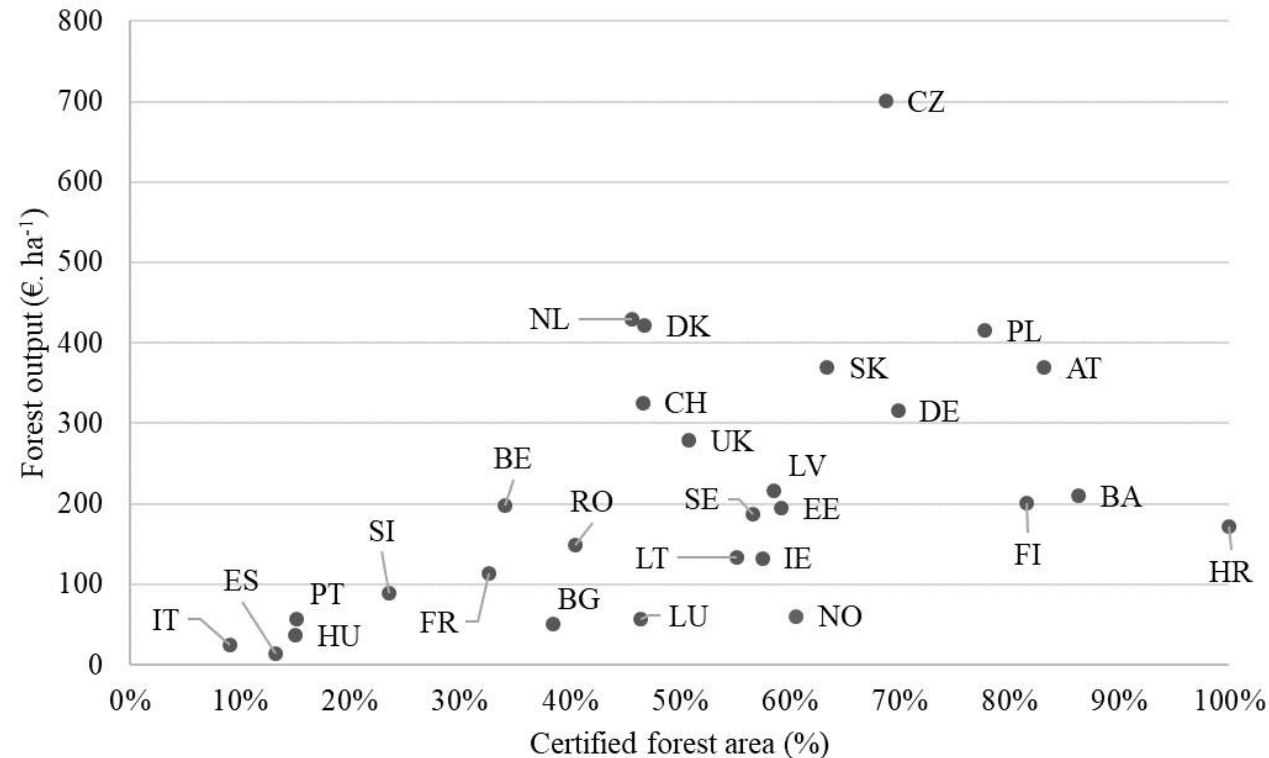
- Between 50 and 60% of certified area, the cost per ha tended to stabilize,
- More than 70% of certified area, the cost started to decline

Biggest deviation:

Czechia, with 69% forest certification area and an intermediate consumption of 466 € ha⁻¹



Certified forest area vs Forest output and secondary activities



Relation between the output generated by the forestry sector and related secondary activities in 2020 by country, in euros *per* ha, and the respective certified forest area for the European countries

Tendency:

More certified forest area higher forest output.

- More than 70% of certified area the income tended to stabilize.

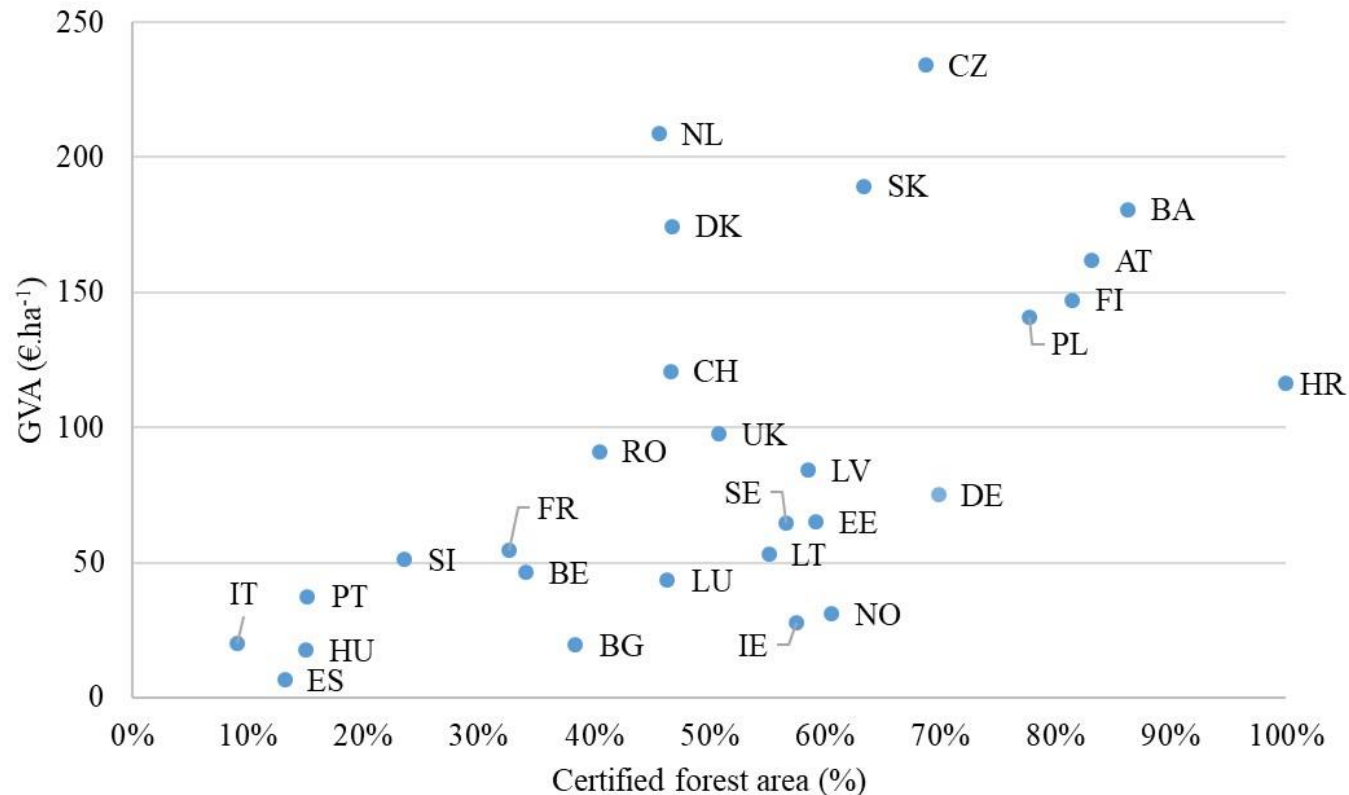
Biggest deviations:

Czechia, with 69% forest certification area and an output of 701 €·ha⁻¹

Croatia, with 100% forest certification area and an output lower than 200 €·ha⁻¹



Certified forest area vs Gross Value Added



Relation between the Gross value added (GVA) in 2020 by country, in euros per ha, and the respective certified forest area for the European countries

Tendency:

More certified forest area higher GVA.

- The tendency is clearer until reaching 50% of forest with certification.
- Countries with higher values of certified forest, presented more distinct patterns

Biggest deviations:

Croatia, with 100% forest certification area and a GVA of 110 €. ha⁻¹



Discussion – Forest certification

- The pattern observed in forest coverage of European countries is not yet fully reflected in the proportion of certified forest
- More than 98 million hectares of the European forest were certified by FSC and PEFC, with PEFC certifying more area than FSC.
- Most of the countries presented a prevalence of one of the certification schemes:
 - e.g. Austria and Finland - PEFC
 - e.g. Croatia – FSC





Discussion – Economic indicators

- In general the more certified forest area, the higher the relevance of the sector in the economy of the country.
 - **Czechia** - the higher expense, but also the largest outputs – possible reflecting national policies continuing favoring conventional management techniques, with focus mostly on the production of timber and other wood products.
 - **Croatia** - all forest land certified by FSC, “low” GVA value, suggesting some inefficiency to full explore the outcomes of its forested territory.



- Main tendency for expenses and outputs to increase along with the increment of certified forest area.





Final remarks

- Results suggest that forest certification is impacting several performance economic indicators across EU countries:
 - + Being relevant for investors who are seeking to align their investments with their values and contribute to positive social and environmental outcomes
 - ++ Being relevant for more conservative investors as it supports the production of timber and non-timber forest products in a responsible manner.





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Thank you!

