



What explains the uneven uptake of forest certification at the global level?

New evidence from a panel-data analysis

Uptake of forest management certification is a necessary (but not sufficient) condition for its effectiveness. This is because without the participation of forest owners and companies, any impact on forest management practices will be, at best, indirect.



Scope and main objectives

So far, uptake of forest certification has been highly uneven throughout the world, both in absolute numbers of hectares certified and as a percentage of total domestic forest cover (“certification density”). Based on an extensive literature review, a number of hypotheses are developed on the relationship between different demand-side and supply-side variables and the uptake of FSC and PEFC (Programme for the Endorsement of Forest Certification Schemes) certification. These hypotheses are then tested using econometric estimation methods with data for a large panel of 150 countries from 2002 to 2020.



Innovative approach

Table 1 shows the main results. An upward arrow (↑) indicates that an increase in the respective explanatory variable also leads to an increase in the density of forest certification. A downward arrow (↓) indicates that an increase in the explanatory variable leads to a decrease in the density of forest certification. A dash (–) means that the explanatory variable has no statistically significant influence on certification density.

The analysis shows that certification density is higher in countries with better governance. The study also demonstrates that the density of forest certification is significantly higher in richer countries (measured as GDP per capita). It is also revealed that both previous experience with forest certification (measured by certification density in the previous year) and a larger absolute forest area correlate positively with certification density. A country's involvement in global trade in timber and wood-based products also proves to be significant: the analysis shows that countries with a stronger export focus in this area tend to have a higher certification density. Furthermore, estimates suggest that countries that sell a larger proportion of their timber exports to Europe are more likely to practice certified forestry. The study also provides evidence of the important role that environmental non-governmental organizations (NGOs) play in the spread of forest certification, with clear differences between the two systems. FSC certification density is significantly higher in countries where many environmental NGOs are represented. In contrast, a higher density of environmental NGOs is significantly associated with less PEFC certification. This result thus supports the view of PEFC as a more “business-friendly” system, which is seen by many environmental NGOs as less ambitious in ecological terms and therefore meets with greater skepticism or even active resistance. FSC certification density is significantly higher in countries where many environmental NGOs are represented. In contrast, a higher density of environmental NGOs is significantly associated with less PEFC certification. This result thus supports the view of PEFC as a more “business-friendly” system, which is seen by many environmental NGOs as less ambitious in ecological terms and therefore meets with greater skepticism or even active resistance.



Conclusions

As uptake is a precondition for effectiveness, the analysis is embedded in a broader debate on the effectiveness of market-driven forms of private governance and contributes to recent efforts in this area to make clearer theoretical statements based on more nuanced empirically grounded analysis.

A particular advantage of the quantitative approach used in this study is that it allows to identify the generic factors that promote or inhibit the adoption of forest certification. Previous research, often based on case studies from a small number of countries, has mainly focused on describing the role of the different characteristics and actors of the national environment in the implementation of forest certification. In order to achieve findings that are as generalizable as possible, the present study went beyond this focus on national specificities and systematically examined the influence of various demand-side and supply-side variables on forest certification adoption at a global level.

Figure 1

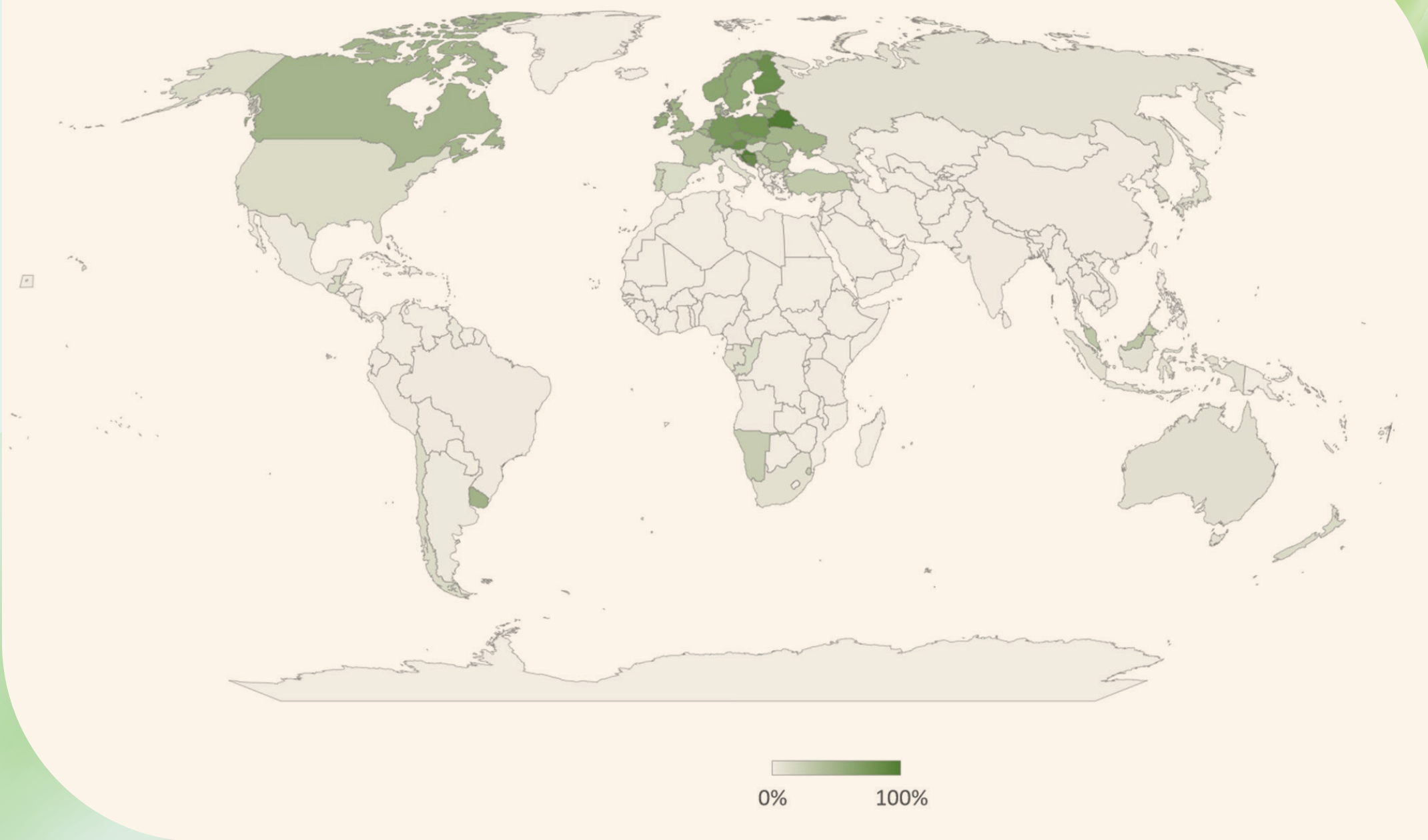


Table 1: Overview of the results of the econometric analysis

Explanatory variables	Influence of an increase in the respective explanatory variable on the density of:		
	FSC certification	PEFC certification	Overall certification
Quality of governance (Index)	↑	↑	↑
GDP per capita (int. Dollar)	↑	↑	↑
Certification density in the previous year (%)	↑	↑	↑
Forest area (ha)	↑	↑	↑
Forest products exports (% of total exports)	↑	↑	↑
Forest products exports to Europe (% of total forest products exports)	↑	↑	↑
Forest products exports to North America (% of total forest products exports)	–	–	–
Environmental NGOs (number per 1,000 inhabitants)	↑	↓	↑

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