Timber Trade and the EUTR

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Timber trade and the conservation of forests
- Five years EUTR
Global trade with wood products*
Trade by commodity groups

*) Wood and wood based products

Billion US Dollar (nominal)

- Semi-finished paper products (pulp, paper+paperboard)
- Finished paper products (articles of p+p, printed matter, reg. cellulose)
- Finished wood products (incl. furniture)
- Semi-finished wood products (sawnwood, veneer, panels)
- Roundwood and residues

Source: UN Comtrade, own calculations

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Global trade with wood products*
Trade of world regions 2014 (all wood products, in roundwood equivalent)

Data describes shares of total global trade:
1.94 billion cubic metres roundwood equivalent

Displayed are flows with a minimum share of 0.5%

Intratrade
Extratrade

Source:
UN Comtrade-Database
Own calculations
EU-trade with wood products
European trade balance 2013-2016 (in roundwood equivalents, rwe)

- Total trade balance in 2016 (in mill. rwe): Imports 160, Exports 205, Net Exp. 45
- Imports into EU increased, total exports are on constant level

Source: Eurostat, own calculations
**EU-trade with wood products**

**European imports 2013-2016 (in quantity and value: rwe, wfe, Euro)**

- Measured in rwe semi-finished prod. play major role, in wfe its roundwood & res.
- If looking at values, finished products are of highest importance

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**Imports in roundwood eq.**

- Semi-finished paper products
- Finished paper products
- Roundwood & Residues

**Imports in wood fiber eq.**

- Semi-finished wood products
- Finished wood products incl. furniture

**Imports in Euro**

- Source: Eurostat, own calculations
EU-trade with wood products
Market coverage of EU-imports by EUTR

- Imports in roundwood equivalent (rwe)
- Imports in wood fiber equivalent (wfe)
- Imports in Euro

But not all wood products are covered by EUTR
- About 3/4 of all commodities codes of wood products are covered by EUTR

Source: Eurostat, own calculations
EU-trade with wood products
Market coverage of European imports by EUTR

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- Coverage ratio decreases with increasing processing stage
- Interestingly, for finished products coverage ratio increased in the last years. However, this has only minor impact on total coverage rate
Timber trade and coverage ratio

In contrast to a declining global trade, imports to the EU increased in the last years.

The market coverage of imported EUTR-products increased slightly. But basically it’s stable at a level of ∼90% in quantity units or ∼75% in monetary units. Especially imports of finished EUTR-products increased compared to finished non-EUTR-products.

→ Despite these descriptive findings a more thorough analysis is necessary to detect possible impacts of the implementation of the EUTR on the (import) market.
Timber Trade and the EUTR
Analysis of time series

Research question

Can the enforcement of EUTR in March 2013 be considered as a legislative intervention event in the time series i.e. are the time series before and after EUTR the ‘same’ or did the enforcement of EUTR generate ‘different’ time series?

Data used

Monthly EUROSTAT Data on EU imports ranging from January 1988 to August 2016 → 344 months (t = 344)

Separate analyses of time series for

• non-tropical wood products listed in EUTR
• wood products listed in EUTR and classified as tropical
Methods: applied time series analysis

- Time domain: modelling the long term variation (trend)
- Frequency domain: detecting the periodic behaviour of time series
- Intervention analysis: examining quantitative impact possibly caused by a (legislative) measure
Analysis of time series
Results (1): time domain, tropical wood products imported by EU

Imports EU - World: only EUTR products (tropical woods)

Peculiarities:

- initially stagnant imports
- different trends und amplitudes (oscillations)
- ‘hidden’ Periods
- negative trend in 2008/2009
- ‘restlessness’ after enforcement of EUTR
Analysis of time series
Results (2): EUTR effects with non-tropical wood products

In time domain visible and significant: trend with linear and logarithmic term → linear trend

In frequency domain the half-yearly periodic behaviour of imports occur in both segments but the annual period existing before EUTR remains afterwards only roughly: 6/12 → 6/10/11

The Intervention model shows a significant increase of imports after EUTR
Analysis of time series

Results (3): EUTR effects with tropical wood products

In time domain recognizable and significant: falling trend → no trend

In frequency domain the EUTR ‘destroyed’ the periodicity of imports:
four monthly periods → no periods

The intervention model that ‘works’ quantitatively does not show any significance of EUTR
Non-tropical wood products

The time series of imports of non-tropical wood products have shown a cyclical behaviour with half-yearly and yearly periods. It occurs in both segments of time series i.e. before and after EUTR.

From theoretical point of view (pattern of the autocorrelation function) the segments of the time series before and after EUTR are the 'same'.

However, new is the significant linear increase of imports. Whether it is related to EUTR is not certain. Altogether the time series of EU imports of non-tropical wood products has not (so far) been disturbed by EUTR.
Tropical wood products

There is no evidence that EUTR caused the imports of tropical wood products by the EU from non-EU countries to decrease. However, the EUTR generated a different time series as that before: it does not show any trend and there are no cycles existing before.

Cautiously interpreted this may mean that caused by EUTR the trade with tropical wood products changed qualitatively: it left the previous pattern of the time series and became ‘restless’.

It may be an indication of a ‘wait-and-see’ attitude of importers caused by lack of implementing provisions to obey EUTR, uncertainty about possible fines etc.
Thank you for your attention!

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The Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries – Thünen Institute in brief – consists of 14 specialized institutes that carry out research and provide policy advice in the fields of economy, ecology and technology.
Annex

Sources:

Eurostat: Internationaler Trade, annual data

Eurostat: Monthly trade data (http://ec.europa.eu/eurostat/data/database)


(http://www.thuenen.de/media/publikationen/thuenen-workingpaper/ThuenenWorkingPaper_45.pdf)