



UNIVERSITY OF BELGRADE
FACULTY OF FORESTRY



THE ROLE OF CHINA IN SUSTAINABLE MARKET SUPPLY OF THE EU WITH WOOD WINDOWS AND DOORS

D.Sc. Slavica Petrović




CONTENT:

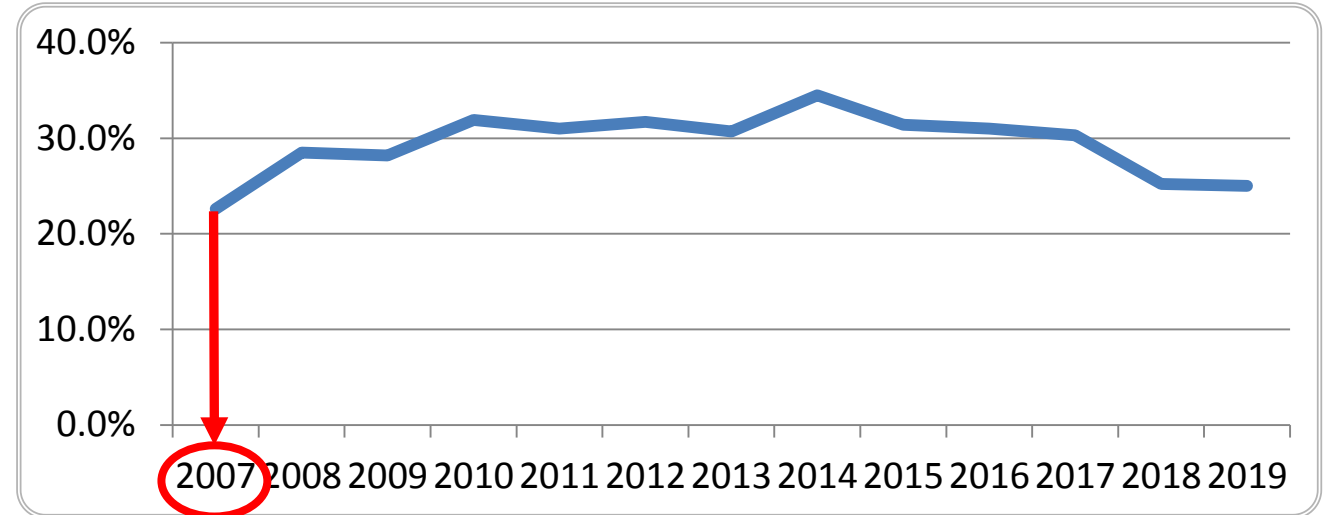
1. THE ANALYSIS OF THE ROLE OF CHINA IN THE EU MARKET SUPPLY WITH WOOD DOORS AND WINDOWS;
2. SIMPLE ECONOMETRIC MODELS

WOOD DOORS AND WINDOWS:

- In 2019: €413.4 million (91.5%: doors, 8.5%: windows);

CHINA 2007-2019:

- $\frac{1}{4}$ - $\frac{1}{3}$ of the total value of wood doors and windows supply from non-EU countries;
- €96.6 million  €103.2 million;
- the average annual growth rate: 0.5%.



The share of China in the import value of wood doors and windows to the EU from non-EU countries in the period 2007-2019 (Source: original)

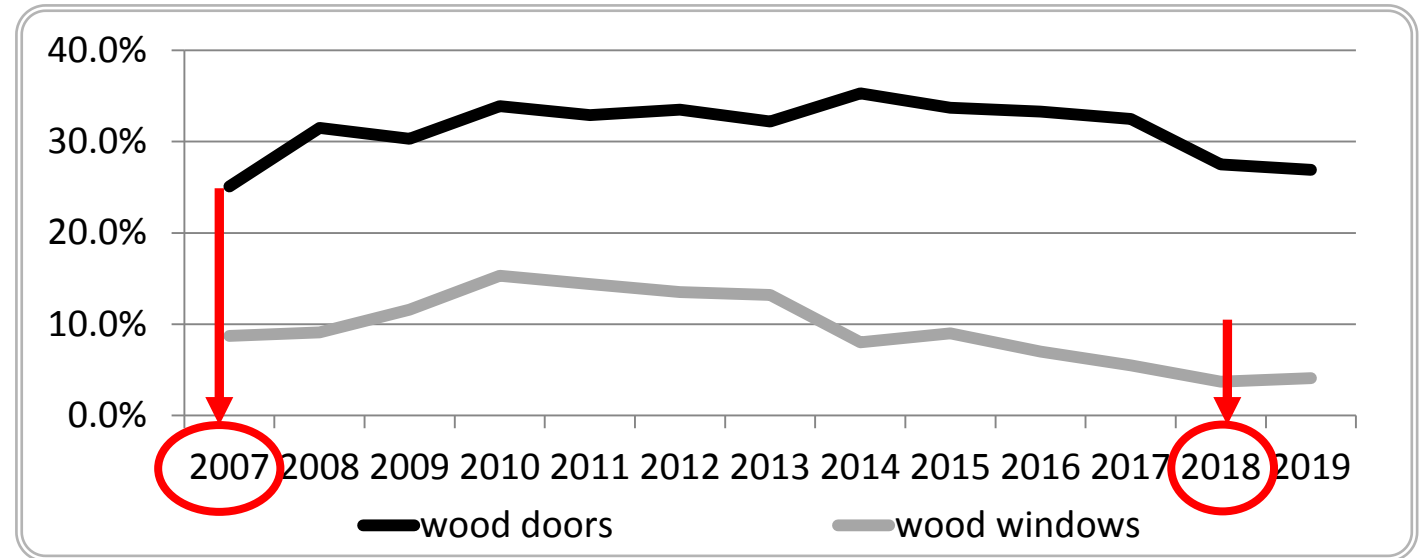
The share of China in import value of wood doors and windows to the EU from non-EU countries in the period 2007-2019

WOOD DOORS 2007-2019:

- more significant for supply with wood doors, than with wood windows;
- the share: 25.1% (2007) to 35.3% (2014);
- €91.0 million €101.8 million
- 2008: €115.9 million;
- an average annual growth rate: 0.9%;

WOOD WINDOWS 2007-2019:

- the share: 3.7% (2018) to 15.3% (2010);
- €5.6 million €1.4 million.



The share of China in the import value of wood doors and windows to the EU from non-EU countries in the period 2007-2019 (Source: original)

The import value of doors from different type of wood to the EU from China in the period 2007-2019

1. HARDWOOD DOORS:

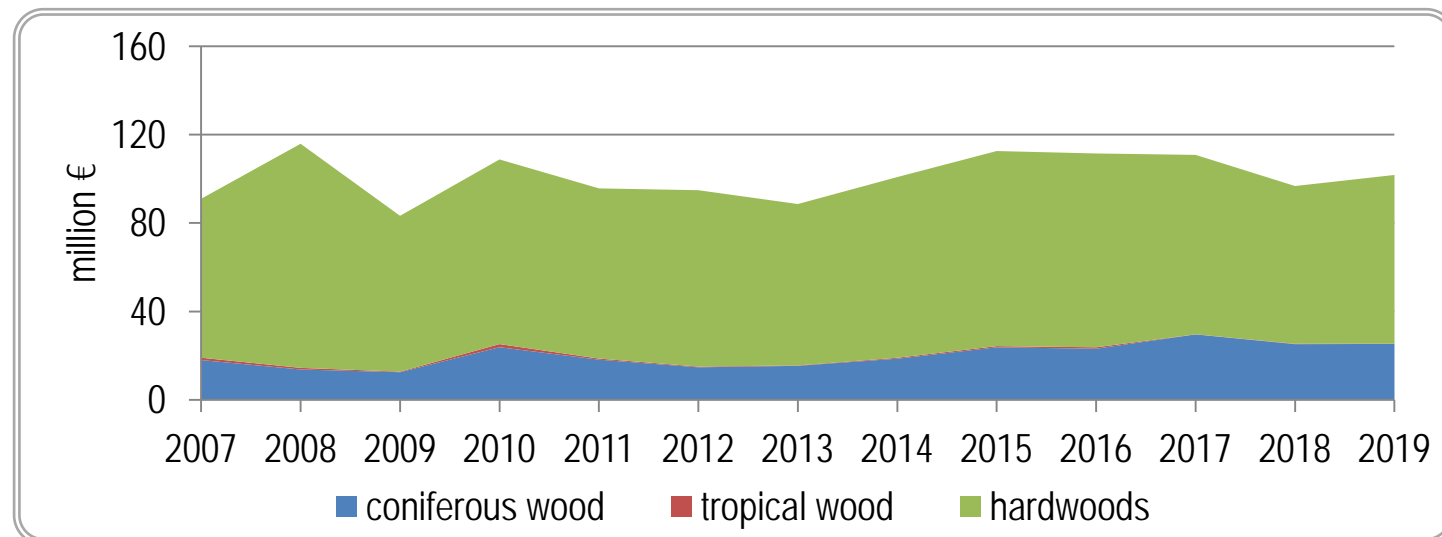
- 2007: €71.9 million → 2019: €76.3 million;
- an average annual growth rate: 0.5%;

2. DOORS FROM CONIFEROUS WOOD:

- 2007: €18.0 million → 2019: €25.3 million
- an average annual growth rate: 2.9%;

3. DOORS FROM TROPICAL WOOD:

- 2007: €1.1 million → 2019: €161,000



The import value of doors from different type of wood to the EU from China in the period 2007-2019 (Source: Eurostat 2020)

The import value of wood windows to the EU from China in the period 2007-2019

1. CONIFEROUS WOOD WINDOWS:

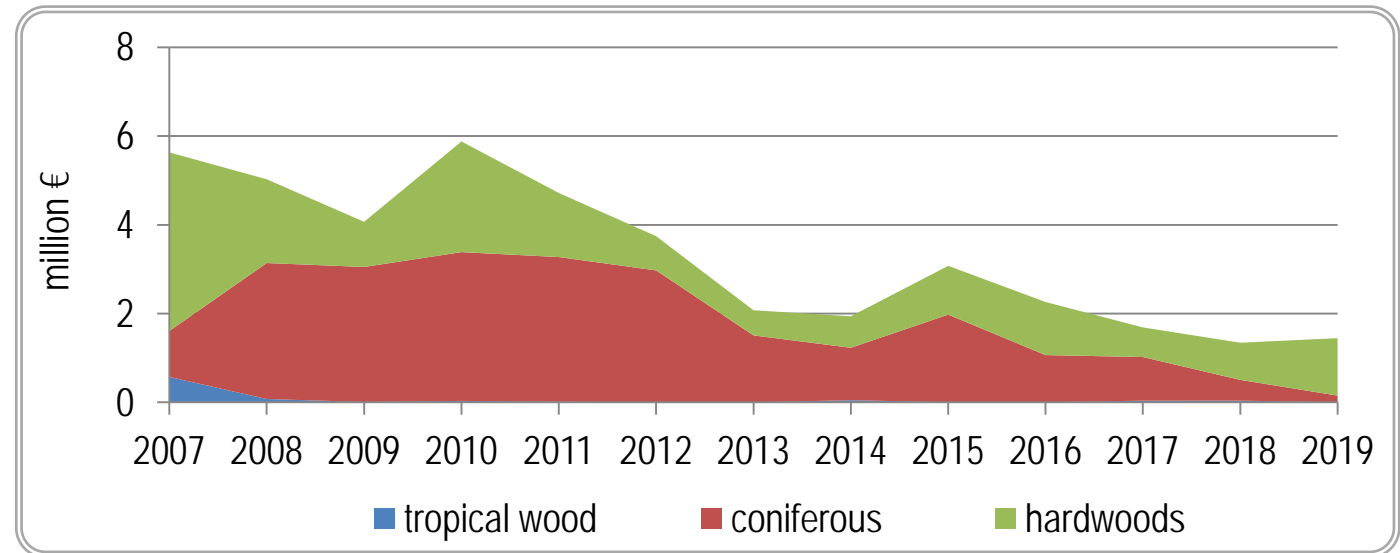
- 2007: 1.0€ million → 2019: 0.2€ million;

2. HARDWOOD WINDOWS:

- 2007: €4.0 million → 2019: €1.3 million

3. TROPICAL WOOD WINDOWS:

- 2007: €0.6 million → 2019: €1,500.



The import value of wood windows to the EU from China in the period 2007-2019
(Source: Eurostat 2020)

The import value of doors and windows of PVC, wood and aluminium to the EU from China in the period 2007-2019

PVC DOORS AND WINDOWS

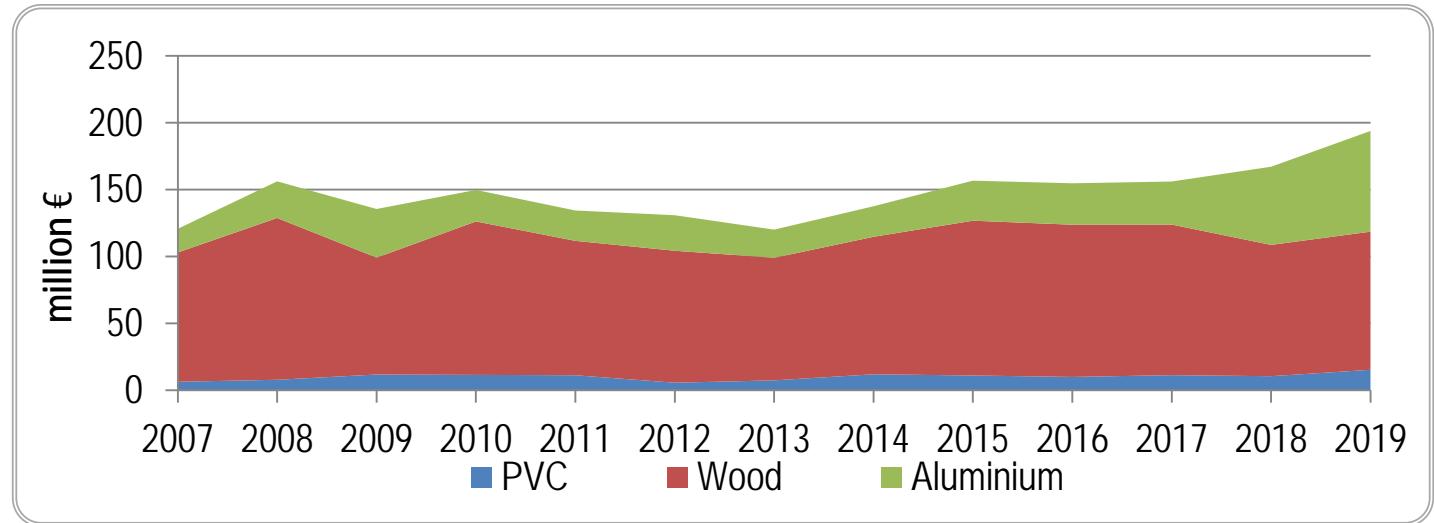
- 2019: €15.3 million;

2007-2019: an average annual growth rate 7.6%;

ALUMINIUM DOORS AND WINDOWS

- 2019: €75.3 million;

- 2007-2019: an average annual growth rate 12.8%;



The import value of doors and windows of PVC, wood and aluminium to the EU from China in the period 2007-2019 (Eurostat 2020)

Simple econometric models

EU's market supply of wood doors and windows from China depends on the impact of:

1. the import of aluminum doors and windows to the EU from China;
2. the import of wood doors and windows from Germany;
3. the import of wood doors and windows from Poland;
4. the number of housing starts in Great Britain.

First simple econometric model

The impact of the import of aluminum doors and windows from China to the EU's market supply:

- linear econometric model;
- a weak correlation among the analyzed variables: $R=0.006$;
- 0.6% of variations of the EU supply with wood doors and windows from China can be attributed to this variable;
- increasing the import of aluminum doors and windows to the EU from China in the period 2017-2019, did not have significant impact to the import of wood doors and windows to the EU from China;
- the Eurostat database does not compile special statistics for aluminum doors and windows, and the ones produced of wood and aluminum, which affects the relevance of the results obtained.

Second simple econometric model

The impact of the import of wood doors and windows from Germany to the EU's market supply:

- exponential econometric model;
- a weak correlation among the analyzed variables: $R=0.10$;
- 1.1% of the import variations of wood doors and windows to the EU from China can be attributed to this variable;

Third simple econometric model

The impact of the import of wood doors and windows from Poland to the EU's market supply:

- power econometric model;
- a weak correlation among the analyzed variables: $R=0.26$;
- 6.6% of variations in the import can be attributed to this variable;
- greater influence of Poland than Germany on the import of wood doors and windows to the EU from China;
- Germany is the largest supplier to the EU, while Poland has grown in importance over recent years;

Forth simple econometric model

The impact of the import of the number of housing starts in Great Britain to the EU's market supply:

- power econometric model;
- a weak correlation between the analyzed variables: $R=0.19$;
- 3.9% of variations in the import can be attributed to this variable;
- China, as a member of non-EU countries, is the largest supplier of the Great Britain market with wood doors and windows.

CONCLUSIONS

Over the period 2007-2019 the EU import value of:

- wood doors and windows from China varied between $\frac{1}{4}$ and $\frac{1}{3}$ of the total import value from non-EU countries;
- wood doors from China varied between from 25.1% (2007) to 35.3% (2014) of the import value from non-EU countries.
- China has no greater importance in supply the EU with wood windows (additionally decreased over the analyzed period);
- in 2019, China accounted for 4.1% in the total import value of wood doors and windows to the EU from non-EU countries;
- China has strong competitors among suppliers to the EU market of wood doors and windows.



THANK YOU FOR ATTENTION!

D.Sc. Slavica Petrovic
University of Belgrade, Faculty of Forestry
Kneza Visislava 1
11030 Belgrade
Republic of Serbia
slavica.petrovic@sfb.bg.ac.rs