

The analysis of production and export main forest products in selected countries. Part II

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Abstract: *The analysis of production and export of main forest products in selected countries (B).* In this paper changes in production and export of hardboard, MDF and particle board in selected countries were analysed. It was interesting to observe the impact of economic crisis on production of main representatives of wood-based panels compared with values of their export. Data analysis leads to the conclusion that world recession after 2007 has stopped mentioned above wood industry products manufacture growth in some countries.

Keywords: hardboard, MDF, particle board, production, export.

INTRODUCTION

According to International Monetary Fund China is world's largest economy since 2012, when the United States of America has lost this title after over 140 years of their dominance. Using purchasing power parity (PPP) the IMF calculated that Chinese economy is worth about $\$18 \cdot 10^{12}$. It is interesting how long will China wield priority in global trade, taking into account the recent results achieved by the Chinese economy. It is widely known that the financial crisis has a negative impact not only on results achieved by individual companies, but as well on the entire sectors of the economy. The Great Recession started in the first decade of the 21st century and 2008 financial crisis, considered by many economists the worst financial crisis since the Great Depression of the 1930s, had a negative impact on many economies of the world. It was interesting to examine how the global crisis has affected the wood industry world's largest economies and to compare this impact to the results of Polish wood sector and selected region's economies.

RESULTS

In this paper production and export of hardboard, MDF and particle board in comparison with their exports in selected countries were analysed. Data was taken from FAOSTAT database for the years 2000 – 2014.

Figure 1 shows production of hardboard in Czech Republic, Poland, Slovakia, China, Germany, Russian Federation and Sweden.

Figure 1 analysis shows, despite lack of some data, that among all analysed countries the fastest increase in hardboard production characterized China's economy. The falling values of hardboard production observed in 2014 may be a signal of the country's economic slowdown or saturation of demand. Hardboard production in countries such as Russian Federation, Sweden and Germany remained at a similar level, not showing much fluctuations (w ramach krzywych dla danego kraju, nie porównując państw). In Poland, hardboard production, after

recording a decrease in 2007, until the end of the analysed period remains at a lower level than in 2000-2003.

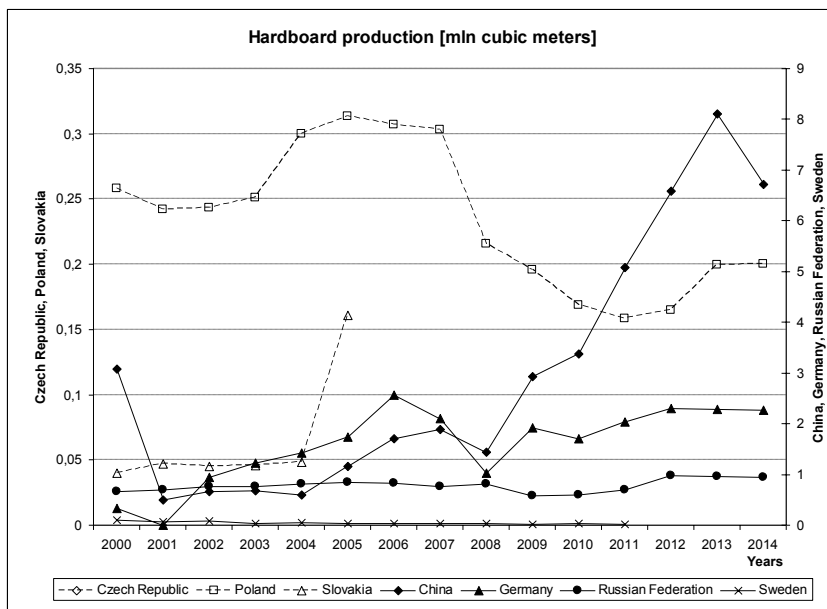


Figure 1. Hardboard production in selected countries in 2000-2014 years [mln m³]. Czech Republic, Poland, Slovakia – left scale; China, Germany, Russian Federation, Sweden – right scale

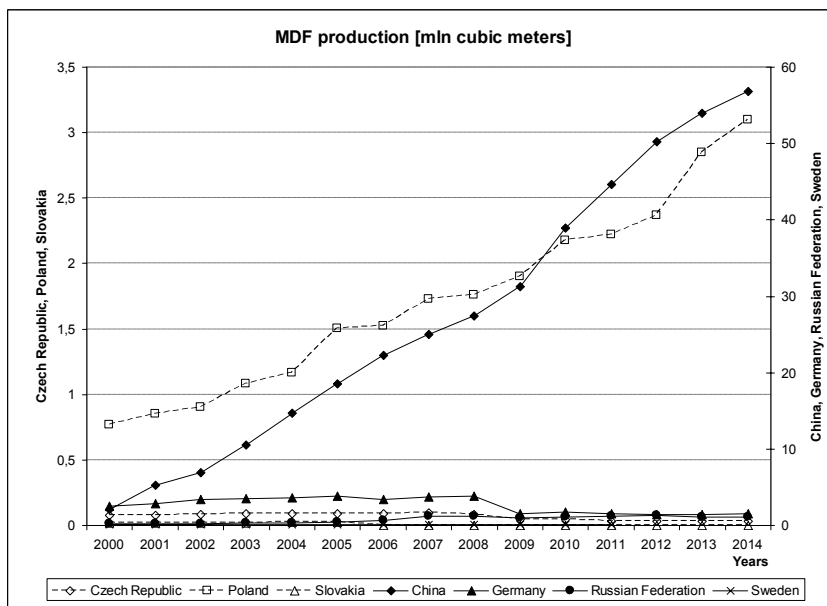


Figure 2. MDF production in selected countries in 2000-2014 years [mln m³]. Czech Republic, Poland, Slovakia – left scale; China, Germany, Russian Federation, Sweden – right scale

In the next figure MDF production in years 2000-2014 in Czech Republic, Poland,

Slovakia, China, Germany, Russian Federation and Sweden were shown.

Figure 2 analysis shows that MDF production in Germany, Russian Federation, Sweden, Czech Republic and Slovakia maintains mostly constant level. Only Poland and China's MDF production values are characterized by an increase, faster in China (chodziło mi tu o tempo tego wzrostu). In 14 years Chinese production of MDF has increased almost 28 times.

Next analysed forest product was particle board production. Its graphical illustration was shown in Figure 3.

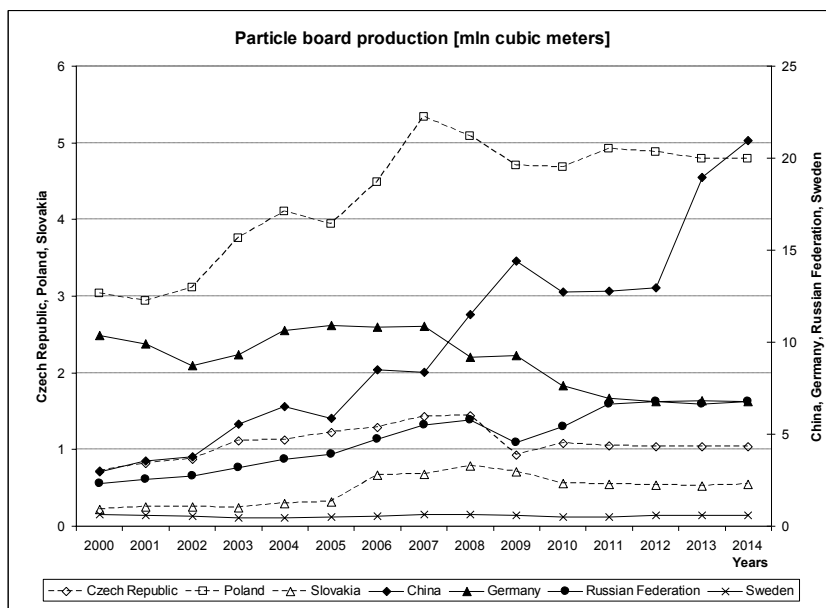


Figure 3. Particle board production in selected countries in 2000-2014 years [mln m³]. Czech Republic, Poland, Slovakia – left scale; China, Germany, Russian Federation, Sweden – right scale

Similarly to MDF production, particle board production in China is characterised by growth, which in year 2014 is 7 times higher than in 2000. Particle board production values in Germany in last years of analysed period have decreased. In 2014 Poland's particle board production notes level similar to that achieved in 2008. Other Polish neighbours record particle board production level lower or close to 1 mln m³ per year.

It was interesting to examine whether the 2007-2008 economic crisis has affected the values of export of main representatives of wood-based panels in analysed countries. The results of this analysis were illustrated in Figure 4, 5 and 6.

Figure 4 shows hardboard export quantities in Czech Republic, Poland, Slovakia, China, Germany, Russian Federation and Sweden.

Analysis of curves in Figure 4 shows that highest increase of hardboard export was noted in Germany in 2006. In the same year China has increased its hardboard export too, but the growth wasn't as high as Germany and reached only 0,84 mln m³. In last analysed year hardboard export in Poland has decreased and reached 0,3 mln m³.

Figure 5 shows changes in MDF export in Czech Republic, Poland, Slovakia, China, Germany, Russian Federation and Sweden in 2000-2014.

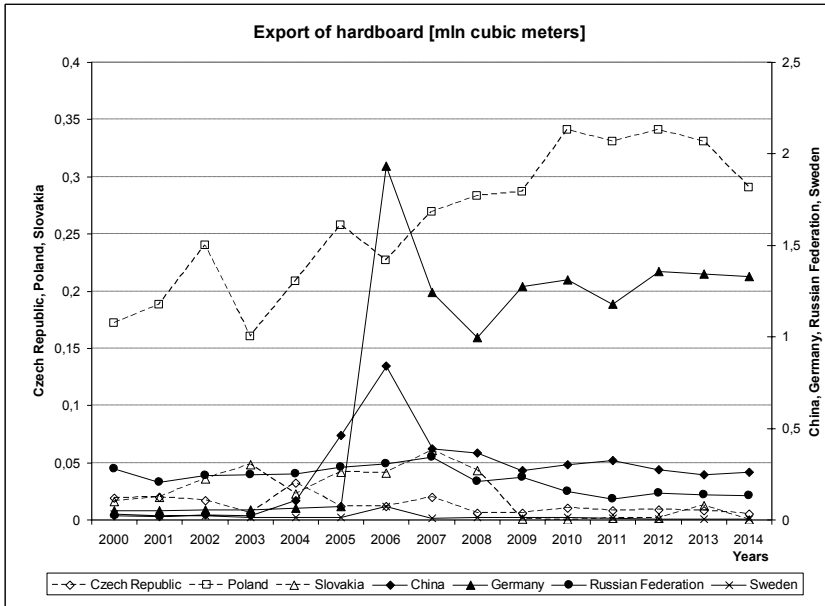


Figure 4. Export of hardboard in selected countries in 2000-2014 years [mln m³]. Czech Republic, Poland, Slovakia – left scale; China, Germany, Russian Federation, Sweden – right scale

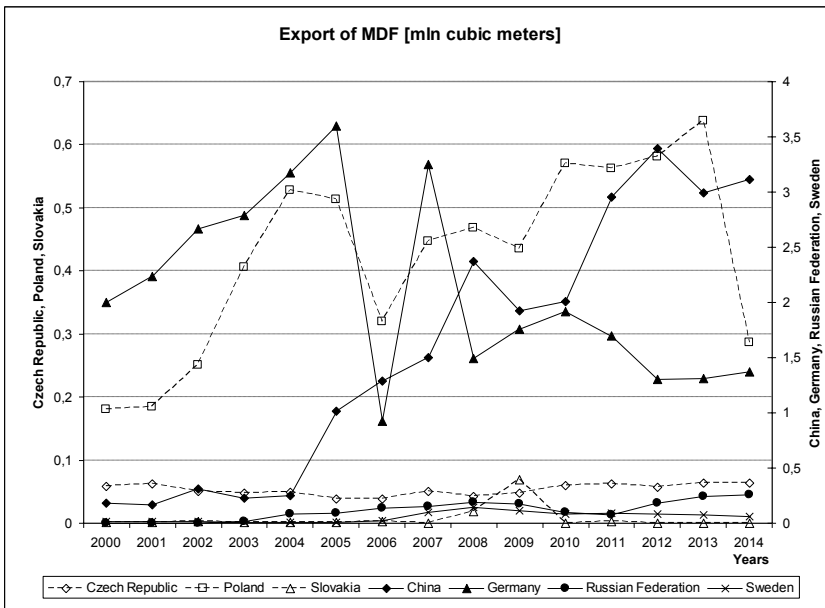


Figure 5. Export of MDF in selected countries in 2000-2014 years [mln m³]. Czech Republic, Poland, Slovakia – left scale; China, Germany, Russian Federation, Sweden – right scale

Figure 5 analysis shows that MDF export in Germany and Poland are characterized by large fluctuations. After decreasing in 2006 in both mentioned countries and improvement in next year, the export of MDF in Germany has decreased again. A significant reduction of MDF export value can be observed in 2014 (from 0,64 mln m³ to 0,29 mln m³ – level last

seen in 2002. In other analysed countries in entire analysed period, MDF export remains at nearly constant level.

As the last in this paper, export of particle board was examined. The results were shown in Figure 6.

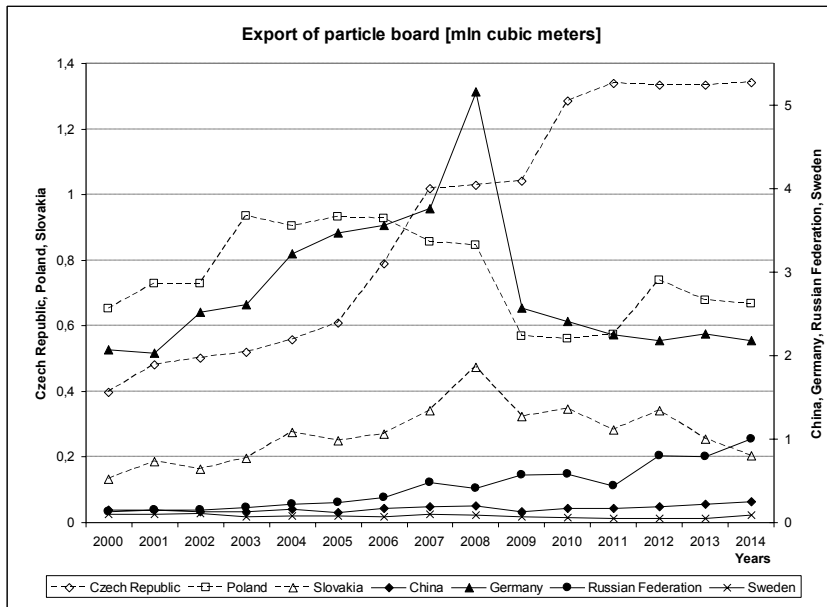


Figure 6. Export of hardboard in selected countries in 2000-2014 years [mln m³]. Czech Republic, Poland, Slovakia – left scale; China, Germany, Russian Federation, Sweden – right scale

The best year for particle board export for German and Slovak economies, was year 2008. Till this year values of particle board export have increased. For Czech Republic values of export have noted increases in almost all analysed period – only in last 4 analysed years, export of particle board remained on stable level. Years 2000-2008 were the best years for Polish particle board export. In the following years export of this kind of wood-based panels declined.

CONCLUSIONS

Analysis of collected data shows, that the best years for hardboard and MDF export for Polish economy was 2007-2013. The curve of hardboard and MDF export is significantly different than curve of particle board export. Inhibition of exports to Russian Federation in 2014 may be the result of the crisis in Ukraine, which led to several sanctions between Russia and OECD economies. Russian Federation decided to introduce counter-sanctions against OECD countries. And despite the fact, that sanctions restrict mostly food products import, these restrictions may also affect import of other goods. The main recipient of Polish wood-based panels is Russian Federation. Depreciation of Russian currency in the end of 2014 may in future cause suffering not only for Polish wood-based panels export but also export of other wood industry sector products.

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Streszczenie: *Analiza produkcji i eksportu głównych produktów leśnych w wybranych krajach. Część II.* W niniejszym opracowaniu poddano analizie zmiany wielkości produkcji i eksportu płyt pilśniowych, MDF i płyt wiórowych w wybranych krajach. Interesującym było zweryfikować, czy kryzys ekonomiczny wpłynął na produkcję płyt drewnopochodnych w porównaniu do wielkości ich eksportu. Analiza danych pozwala wnioskować, iż światowa recesja po roku 2007 zatrzymała wzrosty wymienionych wyżej produktów sektora drzewnego w niektórych krajach.

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