**Impact of EU and Russian sanctions on sectors in EU-27**

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**Abstract**

Followed by the escalation of the Ukraine conflict in 2014, the European Union and Russia applied bilateral sanctions towards each other. This trade conflict affects not only the Russian economy, but also has significant repercussions for many economies in the European Union.

A continuously increasing number of publications deals with the conflict (e.g. Clifford/Ickes 2014, Christen et al. 2014 and 2015 etc.). Many studies are of a descriptive nature (e.g. Kraatz 2014, Ćwiek-Karpowicz/Secrieru 2015, Motova/Natale 2015, Veebel/Markus 2016 etc.). Empirical studies predominantly concentrate on the effects of the conflict on the Russian economy, predicting GDP losses to various extents (e.g. Folkerts-Landau 2014, Ministry of Finance of Finland 2014, Vercueil 2014, Rautava 2014, Barry 2014, Boulanger et al. 2015, Dreger et al. 2016, Tuzova/Qayum 2016, Kholodilin/Netsunajev 2016). Several studies investigate the impact on some chosen or all EU-countries (e.g. Havlik 2014, Husain et al. 2014, Christen et al. 2014 and 2015, Shirov et al. 2015, Oja 2015, Kholodilin/Netsunajev 2016, Crozet/Hinz 2016). This paper contributes to the existing literature by focusing on the impact of sanctions on their sender, the EU-27 and employs an input-output technique along with the econometric forecasting. The consequences of the deterioration of trade relations in general are quantified in terms of overall production, value added, and income effects. A thorough sectoral analysis is provided.

First, a hypothetical scenario is constructed for every economy of the EU-27, representing a “what would have happened” simulation of bilateral trade relations on a sectoral level between Russia and a corresponding European country. These forecasts allow to control for such factors of decreasing exports as a weakening rouble, a stagnating growth in Russia and a collapse of oil prices. A difference between the hypothetic aggregate losses and the realized losses is declared as a loss due to the sanctions. However, since only a consideration of direct losses cannot give a full picture, indirect effects throughout the supply chain on a sectoral level have to be taken into consideration. Therefore, the analysis makes use of an multi-regional input-output approach which, in its turn, allows to differentiate between output losses in every country of the EU-27 due to own export drop and spillover effects along the value added chain within Europe or globally.

Preliminary calculations show that the indirect effects of sanctions tend to be more pronounced than the direct impact. The results also indicate that sectors with strong backward linkages are affected by the sanctions in particular. Moreover, lasting sanctions cause ever higher losses. Considering an example of Germany, the economic losses seem to be overcome for the time being, although the loss suffered in 2014 was the highest in absolute terms. Germany suffered higher losses caused by drop in exports in other European countries rather than caused by own export break down. It indicates a strong trade embeddedness within the EU-27. Other Western European countries, such as Portugal, Belgium or Greece seem to have recovered already in 2015. This is in contrast to the substantial damage inflicted on Baltic and Eastern European economies, such as Lithuania, Poland, Czech Republic or Hungary, where the negative consequences are very sustainable.

**Keywords**: sanctions, trade policy, EU-27

**JEL codes**: F17 (Trade: Forecasting and Simulation), F15 (Economic Integration), E65 (Studies of Particular Policy Episodes)

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