

Paper Title Dairy sector trade dynamics. A network perspective

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Abstract	200 words max
<p>While the positive effect of economic integration on trade is commonly accepted, we still lack a proper understanding of the complex patterns behind this phenomenon. In particular, it is important to better understand how the structure of trade linkages evolves. This is because there are reasons to assume that countries within the economic integration agreement do not trade with each other on random basis. To the contrary, one may argue that they select into trade linkages and that this choice may be driven by various factors. We test two specific predictions. First, we show that the size of the initial trade network is positively correlated with building new trade linkages. In other words, a greater initial number of trading partners facilitates establishing new connections. Second, we fail to reject the hypothesis that the evolution of trade network for a given country depends on the trade network of its trading partners.</p>	
Keywords	Intra-EU trade, dairy sector, network analysis, duration of trade
JEL Code	C12 C35, F15,
Introduction	100 – 250 words
<p>As it is widely recognised, one of the effects of economic integration is an increase in trade flows between countries joining the agreement (Baier and Bergstrand, 2007). As a clear illustration of that one can recall the European Union which, according to some estimates, increased members' trade by 127-146% after 10-15 years (Baier et al., 2008). That said, Trade frictions, and informational barriers in particular, seem to play a huge role here (see e.g. Rauch, 2001). In this paper we aim at improving our knowledge in this respect. To do so, we reconstruct the creation of trade linkages in dairy products within the European Union over the period 2001-2012. This allows us to capture two EU-enlargements in 2004 and 2007.¹ Thanks to this we are able to carefully study what trade connections have been created following these boosts in economic integration. Our focus on dairy sector can be motivated by the fact that milk is the EU's number one single product sector in terms of value. Indeed, in 2015 it accounted for 14% of final agricultural production in the EU.² In addition, European dairy products are traded mostly within the EU, which helps to explain why we choose to study intra-EU trade.³</p>	

¹ What can be noted as well is that our sample period includes also financial crisis which has started in 2008.

² Based on Eurostat data: http://ec.europa.eu/agriculture/milk_en (accessed on 30th of November 2016).

³ EU exports outside Europe accounts for 12% of the overall EU milk production (EDA, 2016).

Methodology	100 – 250 words
<p>Our approach is based on recent advancements in network theory which has been frequently applied to highlight new features characterising international trade (see e.g. Chaney, 2016). Drawing on several contributions to the literature which show that network interactions may importantly shape trade connections (Albornoz et al., 2012; Chaney, 2014; Defever et al., 2015), we test whether the pattern of establishing new trade linkages in dairy sector in the EU depends on the trade network existing at the time of a new node's entry. Two hypothesis are tested:</p> <p>a) whether the size of the initial trade network is positively correlated with building new trade linkages.</p> <p>b) whether the evolution of trade network for a given country depends on the trade network of its trading partners. More specifically, we test whether existing trade relations affect the new links which will be created in the future. In particular, based on a network theory, it can be argued that country <i>A</i> which trades with country <i>B</i> should subsequently engage in trade relationship with trade partners of country <i>B</i>. The rationale behind this argument is that the existing relations as well as linkages that our trade partners have should help to overcome the informational barriers when approaching new markets. We employ duration analysis to assess the impacts of network on trade. Recent papers point out three relevant problems inherent in the Cox model that reduce the efficiency of estimators. Thus following Hess and Persson (2011), we estimate different discrete-time models including Probit and Logit specifications.</p>	
Results	100 – 250 words
<p>For now, we may present only some preliminary results. These emphasise, the duration of trade is different when Old Member states and New Member States are considered, being significantly shorter for the latter. As expected, EU accession attenuates these differences. Similarly, well connected (from a network perspective) countries tend to have longer trade spells than less centrally located ones. We also fail to reject the hypothesis that building new relationships and/or maintaining already existing ones (i.e. the duration of trade) is positively correlated with the location of the milk exporter within the network, more specifically to how important the trading partners are from a network perspective. A discussion on results including caveats and possible directions to further research completes the section.</p>	
Discussion and Conclusion	100 – 250 words
<p>While there exists an extensive literature devoted to investigate trade in agro-food products, to best of our knowledge, this paper is the first to look at it using this approach. Most of the existing studies focus on explaining the volume of trade. Instead, the formation of trade linkages between countries is much less understood. We are also not aware of any reserach focusing on trade in agro-food products which would deal with this issue from the perspective of network theory.</p>	

