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Research Question
We examine how economic crisis affect the value of trade at the start of a new trade relationship, the length of trade relationships, how quickly trade grows within a relationship

Methods
Using annual trade data at the 6-digit HS level for over 40 leading wine exporter countries from 2000 to 2012, we employ various panel econometric models

Results
We find that economic crisis has not impacts on initial value of wine export, whilst it has positive effects on export growth, and decrease the probability of failure of wine exports.

Abstract
Last two decades, the world’s wine market has experienced a rapid process of globalization. Growth in the wine trade boomed during the nineties both in wine consumption in Northern Europe and in North America and in exports of the so-called New Worldwine producers. Recently, the wine international trade has been boosted by increasing demand in countries (Anderson et al., 2003; Anderson and Nelgen, 2011; Mariani et al., 2012). There is a growing literature on various aspects of recent developments on world wine markets including the impacts tariff and tariff frictions (Mariani et al 2014; Dal Bianco et al 2016), dynamics of world wine trade (Castillo et al 2016), characteristics of intra-EU markets (Fertő et al. 2016; Lombardi et al 2016).

However, one question is not yet addressed in empirical wine trade literature: when do countries trade and how long do their trade relationships last? Our analysis of this latter issue is, among other things, motivated by the finding of recent research that many countries do not trade in any given year and for any given product (Haveman and Hummels 2004, Feenstra and Rose 2000, Schott 2004). As a consequence of it, a new literature focusing on the duration of international trade has emerged. Based on the surprising finding in Besedeš and Prusa (2006a) that US import flows have a remarkably short duration, the question asked is: “which factors determine how long international trade relationships last?” From a policy-oriented point of view this is indeed an important question to ask. Trade will not grow very much if new products stop being exported after only a few years. Therefore, to better understand which factors may help countries increase their trade, and thereby potentially improve economic development, it is important to learn more about what determines the duration of trade flows. Recent studies provide evidence that trade relationships (e.g. Besedeš and Prusa 2006b; Nitsch 2009; Fertő and Soós 2009; Brenton et al. 2010; Obashi 2010; Cadot et al. 2013) are surprisingly short lived. Empirical studies usually confirm that exporter characteristics (such as GDP and language), product characteristics (such as unit values) and market characteristics (such as the import value, and market share) affect the duration of trade (Hess and Persson (2011, 2012). However all studies focus only manufacturing or all products except (Bojnec and Fertő 2012b).

In addition, being in or out of the market may be a particularly important issue when the market is affected by external shocks. The economic crisis in 2008 is good natural experiment. Our research focuses on the question how major wine exporter countries in the world market before and after the economic crisis. Specifically, we examine how economic crisis affect the value of wine trade at the start of a new wine trade relationship, the length
of wine trade relationships, and how quickly wine trade grows within a relationship. Following theoretical model developed by Besedes et al (2015) we test the following hypotheses. First, the probability of a trade relationship ceasing is decreasing in its size and age (or duration). Second, the growth rate is decreasing in size conditional on duration and decreasing in duration conditional on size. Third, larger initial volumes are associated with longer lasting relationships and lower hazard rates. Finally, we expect that the economic crisis has negative impact on the duration of wine exports.

Our empirical analysis is based on a panel data set includes bilateral trade data of 40 major wine exporter countries and 216 trading partners between 2000-2012, giving 54587 observations. Wine export data comes from the World Bank World Integrated Trade Solution (WITS) database in HS-6 level, product code 2204, in US dollars (World Bank, 2016).

To properly identify the effects of economic crisis, we need to differentiate between spells active when the crisis begins and spells which begin after the crisis. In order to properly capture all effects of economic crisis we use two variables. One variable, labeled ‘crisis in effect,’ identifies the years during which crisis is in force, thus identifying the differential effect of the crisis itself. Since model predicts that relationships or spells which start after the crisis are different from already active ones, we use a second dummy variable, ‘Spell starts after crisis,’ which identifies all spells which started after the crisis is put in force. The ‘crisis in effect’ and ‘Spell starts after crisis’ variables in conjunction identify the effect on spells which begin after the crisis is in effect.

We are interested in the effect economic crisis have on three attributes of trade spells: the volume of trade in the first year, the growth of the volume of trade while the spell is active, and the conditional probability it will cease to be active or the hazard rate. We examine the effect on initial volumes and the growth of trade within an active spells by estimating two separate random effect panel regressions:

\[
X(1)ikt = \alpha_0 + \alpha_1 \text{Crisis} + \alpha_2 \text{afterCrisis}ikt + \epsilon_{it} (1)
\]

\[
X\text{growth}ikt = \alpha_0 + \alpha_1 \text{Duration} + \alpha_2 \text{Xikt-1} + \alpha_3 \text{Crisis} + \alpha_4 \text{afterCrisis}ikt + \epsilon_{it} (2)
\]

Where \(X(1)ikt\) denotes export values in initial period, \(X\text{growth}ikt\) describes the export growth, \(Xikt-1\) is lagged value of exports, Crisis is a dummy takes 1 before 2009, otherwise zero, afterCrisis is a variable reflecting how long the crisis has been in effect when a spell starts, Duration the age of spell k in year t.

We estimate the hazard of exports ceasing at time n by estimating a discrete hazard using random effects probit specification controlling to origin’s and destination’s GDP, a vector of of bilateral time-invariant gravity variables (distance, common border, and common language)

\[
XDikt = \alpha_0 + \alpha_1 \text{Duration} + \alpha_2 \text{Xikt-1} + \alpha_3 \text{Crisis} + \alpha_4 \text{afterCrisis}ikt + \alpha_5 \text{GDPit} + \alpha_6 \text{GDPkt} + \alpha_7 \text{distanceik} + \alpha_8 \text{borderik} + \alpha_9 \text{languageik} + \epsilon_{it} (3)
\]

Descriptive statistics confirm the short lived trade relationship at the world wine market: 22 per cent of all trade relationship survived the entire period, while 40 per cent of them lived only 1 year. The share of single spells is above 60 percent. We find evidence on the relevance of trade costs. Our estimations imply that economic crisis has not significant impacts on initial value of wine export starting before crisis, whilst it has negative effects on spells beginning after crisis. Surprisingly, economic crisis positively influences the export growth, and decrease the probability of failure of wine exports. The effects are usually smaller for spells starting after crisis.