Padua 2017 Abstract Submission

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Conference Presentation

Corresponding Author
Olivier Bargain

E-Mail
olivier.bargain@univ-amu.fr

Affiliation
Aix Marseille University

Co-Author/s

Name	E-Mail	Affiliation
Jean-Marie Cardebat	jean-marie.chiappini@u-bordeaux.fr	University of Bordeaux
Raphael Chiappini	raphael.chiappini@u-bordeaux.fr	University of Bordeaux

Keywords
Export; French Wine; Gravity mode; Tastes; Frictions

Research Question
We estimate a gravity model to disentangle the main determinants of French wine exports, especially focusing on the role played by trade costs.

Methods
State-of-the-art gravity model (Anderson and Van Wincoop, 2003, 2004) using Poisson pseudo-maximum likelihood (PPML) estimator to deal with zeros.

Results
In addition to exchange rates and trade barriers, we highlight the role of cultural distance and various sources of friction ('dark trade costs').

Abstract
Wine is now widely available and wine drinking has become common in Western countries, in Japan, Russia, China and some South American countries like Brazil, while it remains a luxury good in poorer parts of the world. The consumption dynamics have evolved relatively fast with both the democratization of wine consumption and the emergence of new producers ("new world" wines). In this context, it is important to assess the determinants of wine exports from France, which is probably the most famous wine country and still today the world's leading exporter (in value). However, trade frictions such as transportation cost, tariffs and non-tariffs barriers or even cultural discrepancies between countries can strongly affect exports. For instance, Kashiha et al. (2016) focusing on European wine shipments reveal that border effects are important and highly asymmetric, even within the European free-trade zone. Moreover, the capacity of firms to bear trade costs is also highly correlated to the quality of their products. Indeed, Martin and Mayneris (2016) show that distance (which is a proxy for trade costs) has almost no effect on high-end exporters. Given the diversity of French wines, an interesting perspective pertains to the export determinants of different French wines across different markets of a global world of wine consumption.

We pursue this idea by exploiting a unique dataset on wine shipments in volume and value terms of almost 400 different types of French wines to 27 countries between 1998 and 2015 (see also Cardebat and Figuet, 2015). After describing the recent trends in exports, both at the extensive and intensive margins, we estimate a gravity model to disentangle the main determinants of wine exports, especially focusing on the role played by trade costs. Our estimations are based on state-of-the-art specifications (Anderson and Van Wincoop, 2003, 2004). In particular, we

rely on the Poisson pseudo-maximum likelihood (PPML) estimator developed by Santos Silva and Tenreyro (2006) to account for heteroskedasticity and the presence of zero trade flows in the data.

We include a variety of relevant factors including: GDP of destination country, exchange rates (appreciation or depreciation of the Euro relative to destination currency), trade barriers and trade costs (distance, average custom duty, prohibitions and specific tariffs, taxation, technical barriers and sanitary and phytosanitary standards, etc). We also question the role of cultural dimensions regarding wine culture and tastes (Anderson and Wittwer, 2013), regarding health and beliefs; the role of country-specific retailing structure and wine commercialization; complementarity or substitution with local wine production (potential demand for variety). Indeed, Head and Mayer (2013) argue that behind the estimated coefficient associated with distance or to the border effect in the standard gravity model of trade, hidden sources of resistance are of greater importance. They called these sources, "dark trade costs", making an analogy to astrophysics, and reveal that these dark resistance account for 50%–85% of the effect of distance on trade flows. This "new" sources of frictions could be linked to spatial decay of information, localized tastes, colonial legacies, and long-run impacts of conflict. These sources of frictions could be very important in wine trade as tastes are very important and, therefore, should be evaluated.

This paper focuses on the broad offer of French wines (red, white, sparkling, with and without mention of origin and according to different packaging – i.e. bulk or bottled wines), including fine wines from appellations communales. Hence it comes along recent attempts to explain export determinants of champagne (Crozet et al., 2012), cognac brandy (Bouët et al., 2015) or French luxury brands (Fontagné and Hatte, 2013, Martin and Mayneris, 2015). It is also complementary to general studies on world trade of food and wine that assess the broad determinants related to trade costs and tariffs and tastes (Anderson and Wittwer, 2013, Dal Bianco et al., 2015, Raimondi and Olper, 2011, Fogarty, 2010). Having a high diversity of wines in our database also allows us to study exports by quality level and to test the Alchian-Allen conjecture in line with Hummels and Skiba (2004). Moreover, the large distribution of different quality level (based on packaging and mention of origin) provides an opportunity to analyze the evolution of the demand for quality from importing countries and changes in their tastes.

References

Anderson, J.E. and E. Van Wincoop (2003): "Gravity with gravitas: A solution to the border
Puzzle". American Economic Review 93: 17092.

Anderson, J.E. and E. Van Wincoop (2004): "Trade Costs", Journal of Economic Literature, Vol. 42, No. 3, 691-751.

Anderson, K., & Wittwer, G. (2013). Modeling global wine markets to 2018: Exchange rates, taste changes, and China's import growth. Journal of Wine Economics, 8(02), 131-158.

Bouët, A., C. Emlinger & V. Lamani (2015) : "What Determines Exports of Luxury Products? The Case of Cognac," Proceedings Issues, 2014: Trade and Societal Well-Being, December 13-15, 2015, Clearwater Beach, Florida 229248, International Agricultural Trade Research Consortium.

Cardebat, J. M., & Figuet, J. M. (2017): Exports, exchange rate variations and firms reactions: the case of French wine. forthcoming in Journal of Wine Economics

Chaney, T. (2013) Liquidity Constrained Exporters. NBER Working Paper No. 19170.

Crozet, M., K. Head & T. Mayer (2012): "Quality Sorting and Trade: Firm-level Evidence for French Wine," Review of Economic Studies, 79(2), 609-644.

Dal Bianco, A., Boatto, V.L., Caracciolo F., and Santeramo, F.G. (2015) Tariffs and nontariff
frictions in the world wine trade", European Review of Agricultural Economics, vol. 43(1), pages 31-57.

Dascal, D., Mattas, K., & Tzouvelekas, V. (2002). An analysis of EU wine trade: A gravity model approach. International Advances in Economic Research, 8(2), 135-147.

Kashiha, M., Depken, C. and Thill, J.-C. (2016), "Border effects in a free-trade zone: Evidence from European wine shipments", Journal of Economic Geography, article published online.

Fogarty, J. (2010), The demand for beer, wine and spirits: a survey of the literature. Journal of Economic Surveys 24(3): 428-478

Fontagné, L. and S. Hatte (2013) European High-End Products in International Competition. Paris School of Economics Working Paper n. 37.

Head, K. and T. Mayer (2014) Gravity Equations: Workhorse, Toolkit and Cookbook, in G. Gopinath, E. Helpman and K. Rogoff, Handbook of International Economics, Volume 4, Amsterdam, Elsevier.

Head, K. and T. Mayer (2013), "What separates us? Sources of resistance to globalization", Canadian Journal of Economics 46(4), pp. 1196-1231.

Helpman E., Melitz, M.J., and Y. Rubinstein. (2008) Estimating Trade flows : Trading Partners and Trading Volumes, Quarterly Journal of Economics, 123(2), 441-487.

Hummels D. and Skiba A. (2004). Shipping the Good Apples Out? An Empirical Confirmation of the Alchian-Allen Conjecture. Journal of Political Economy, 112(6): 1384-1402.

Martin, J. and F. Mayneris (2015), "High-End Variety Exporters Defying Distance: Micro Facts and Macroeconomic Implications", Journal of International Economics 96(1), pp. 55-71.

Nelson, J.P. (2013) Robust Demand Elasticities for Wine and Distilled Spirits: Meta-Analysis with Correction for Outliers and Publication Bias. Journal of Wine Economics 8(3): 294-317.

Raimondi, V. and Olper, A. (2011): "Trade Elasticity, Gravity and Trade Liberalization: Evidence From the Food Industry", Journal of Agricultural Economics 62(3), 525-550.

Santos Silva, J.M.C. and Tenreyro, S. (2006), "The log of gravity", Review of Economics and Statistics 88(4), pp. 641-658.

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French Wine Trade: General Determinants, Frictions and Tastes

Olivier Bargain (Aix-Marseille University)
Jean-Marie Cardebat (LAREFI/University of Bordeaux)
Raphaël Chiappini (LAREFI/University of Bordeaux)

Abstract

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References

Anderson, J.E. and E. Van Wincoop (2003): "Gravity with gravitas: A solution to the border Puzzle". *American Economic Review* 93: 17092.

Anderson, J.E. and E. Van Wincoop (2004): "Trade Costs", *Journal of Economic Literature*, Vol. 42, No. 3, 691-751.

Anderson, K., & Wittwer, G. (2013). Modeling global wine markets to 2018: Exchange rates, taste changes, and China's import growth. *Journal of Wine Economics*, 8(02), 131-158.

Bouët, A., C. Emlinger & V. Lamani (2015) : "What Determines Exports of Luxury Products? The Case of Cognac," Proceedings Issues, 2014: Trade and Societal Well-Being, December 13-15, 2015, Clearwater Beach, Florida 229248, International Agricultural Trade Research Consortium.

Cardebat, J. M., & Figuet, J. M. (2017): Exports, exchange rate variations and firms reactions: the case of French wine. forthcoming in *Journal of Wine Economics*

Chaney, T. (2013) Liquidity Constrained Exporters. NBER Working Paper No. 19170.

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Dal Bianco, A., Boatto, V.L., Caracciolo F., and Santeramo, F.G. (2015) Tariffs and nontariff frictions in the world wine trade", *European Review of Agricultural Economics*, vol. 43(1), pages 31-57.

Dascal, D., Mattas, K., & Tzouvelekas, V. (2002). An analysis of EU wine trade: A gravity model approach. *International Advances in Economic Research*, 8(2), 135-147.

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Fogarty, J. (2010), The demand for beer, wine and spirits: a survey of the literature. *Journal of Economic Surveys* 24(3): 428-478

Fontagné, L. and S. Hatte (2013) European High-End Products in International Competition. Paris School of Economics Working Paper n. 37.

Head, K. and T. Mayer (2014) Gravity Equations: Workhorse, Toolkit and Cookbook, in G. Gopinath, E. Helpman and K. Rogoff, *Handbook of International Economics*, Volume 4, Amsterdam, Elsevier.

Head, K. and T. Mayer (2013), "What separates us? Sources of resistance to globalization", *Canadian Journal of Economics* 46(4), pp. 1196-1231.

Helpman E., Melitz, M.J., and Y. Rubinstein. (2008) Estimating Trade flows : Trading Partners and Trading Volumes, *Quarterly Journal of Economics*, 123(2), 441-487.

Hummels D. and Skiba A. (2004). Shipping the Good Apples Out? An Empirical Confirmation of the Alchian-Allen Conjecture. *Journal of Political Economy*, 112(6): 1384-1402.

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Raimondi, V. and Olper, A. (2011): "Trade Elasticity, Gravity and Trade Liberalization: Evidence From the Food Industry", *Journal of Agricultural Economics* 62(3), 525-550.

Santos Silva, J.M.C. and Tenreyro, S. (2006), "The log of gravity", *Review of Economics and Statistics* 88(4), pp. 641-658.