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Introduction to the Issue

This issue of the *Journal of Wine Economics* opens with "Explaining World Wine Exports in the First Wave of Globalization, 1848–1938" (Ayuda, Ferrer-Pérez, and Pinilla, 2020). María-Isabel Ayuda, Hugo Ferrer-Pérez, and Vicente Pinilla analyze the determinants of world wine exports during the century preceding WWII. Employing an extended gravity model, the authors find that much of the trade volume is determined by external shocks (e.g., Russian Revolution, WWI, Prohibition) and by (lagged) grape yields. As expected, they find a positive effect of exporting countries' yields and a negative effect of importing countries' yields. The results also suggest the existence of a significant home bias. In addition, "as was the case with trade as a whole, the fall in transaction costs favored exports, at least those of lower-priced and lower-quality wine. However, the liberalization of trade had a lesser impact on wine than on other products" (p. 263).

In the following paper, entitled "Pricing Models for German Wine: Hedonic Regression vs. Machine Learning," Britta Niklas and Wolfram Rinke present various hedonic and machine learning models in order to explain retail prices of German Riesling wine (Niklas and Rinke, 2020). The study suggests that machine learning exhibits slightly greater explanatory power than the hedonic approach and allows for a more detailed interpretation of the results. The machine learning model is then applied to other varieties such as Silvaner, Pinot Blanc, and Pinot Noir. The analysis suggests that the influence of an independent variable on the wine price cannot be estimated by a single coefficient, since the marginal effects vary among quality categories, as well as by price points and critical scores. Regarding temperature variables, the authors find that "during the harvest season, especially higher minimum and maximum temperatures lead to a negative price effect for wines of all grape varieties and quality categories, so that earlier harvest is recommended for all grape varieties in cases of warmer harvest seasons, such as was the case in 2018" (p. 306)

In "An Empirical Analysis of the Effect of Sub-Divisions of American Viticultural Areas on Wine Prices: A Hedonic Study of Napa Valley," Grant Keating analyzes the economic value of sub-AVAs within the Napa Valley appellation (Keating, 2020). Drawing on a dataset of 5,017 Napa Valley wines reviewed by *The Connoisseurs' Guide to California Wine* between 2004 and 2013, he runs various hedonic pricing models. The reduced form and rating-based models suggest that the majority of the sub-AVA effects stem from pure sub-AVA influences as opposed to indirect effects through critics' ratings. That is, consumers value

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sub-AVA wines independently of critical scores. "These results indicate that Sub-AVAs deliver a more substantial price effect than previous literature has suggested" (p. 312)

The last paper in this issue, entitled "A Model of Global Beverage Markets," is by Glyn Wittwer and Kym Anderson. The article describes a new general equilibrium model of the world's markets for alcoholic beverages, differentiated by wine, beer, and spirits; the model distinguishes 44 countries and 7 residual regions. Employing their model, the authors report results from various projections to 2025 under different scenarios. Two alternative scenarios are explored and compared to the business-as-usual benchmark. One scenario simulates the withdrawal of the United Kingdom from the European Union (EU); the other simulates the effects of the recent imposition of additional 25% tariffs on selected beverages imported by the United States from several EU member countries. Future model applications may include simulations of COVID effects on wine consumption and trade.

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