

Vienna 2019 Abstract Submission

Title

The Age Dynamics of Italian Vineyards: Factors Influencing Different Regional Trends

I want to submit an abstract for:

Conference Presentation

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Keywords

Italian wine regions, Vineyards age structure, Demographic analysis, Competitiveness

Research Question

What are the regional differences of the Italian trend in vine area? Which factors explain these differences? Are these differences related to the degrees of competitiveness of the Italian regions?

Methods

The age structure of the vineyards is analyzed based on a demographic balancing equation. The assessment of the factors influencing regional competitiveness relies on the estimate of a regression model.

Results

The age structure of regional vineyards and its dynamics. The rates of new plantations and of explantations (younger and older vines). Highlights on factors influencing the change at regional level.

Abstract

Over the last few decades, wine grape cultivation worldwide has reduced. The decrease is mainly due to traditional producing countries while countries in the so called "new wine world" increased their role (Banks and Overton, 2010; Giuliani et al., 2011). These changes in the wine geography have had, still have and will have in the future, a deep impact on the structure and equilibria of the sector in each producing country (Gaeta and Corsinovi, 2014; Pomarici, 2016). Beside affecting the overall size of the productive base, these time trends influence the age structure of the cultivated area and this, in turn, affect the quantity produced, the quality of production, the technologies adopted and the organization of the whole chain. Furthermore, due to the long-time span of vines life, present demographic trends also affect the future of the sector and, particularly, its capacity to catch-up with demand trends.

Focusing on the Italian wine sector, the paper analyses the evolution of vineyards and their age structure at regional level. The goal is to assess the different trends that feature the production base of the wine sector in the different Italian regions. Furthermore, factors that impact on these different regional trends are explored. The

relevance of the goals of our study is based on the hypothesis that the different regional trends are related with the competitiveness of the product in the global markets, on the one side, and with the competitiveness of the sector in the use of resources at the local level, on the other side.

The demographic structure of the regional vineyards is analyzed by adapting to vines population the demographic balancing equation commonly used in demographic analysis of human populations (Franco and Silvertown, 2004; Rowland, 2003; Harper and White, 1974). Afterwards, the assessment of the factors influencing regional competitiveness relies on the estimate of a simple model where the demographic structure is explained with variables related to the wine sector structural features, organization and market performance at regional level. Among these variables, the following will be included: the market price for vineyards, average size of vineyards, average size and number of grape processors, average size and number of wine cooperatives, the incidence of PDO/PGI wines, prices of wine grapes. Data are gathered from the Italian Statistics Bureau (ISTAT) and other official sources (e.g. CREA and ISMEA).

Expected results include: i) the complete picture of the vineyards age structure of the Italian regions and its dynamics over three decades (1982-2010); ii) the assessment of the demographic balances of the regional vineyards by age class. This gives insights on the rate at which producers have been investing in new plantations, explanted old vines (i.e. plants beyond the end of their economic life) and, also, younger vines (i.e. vines that didn't reach the end of their economic life; iii) the assessment of some factors that have been driving the change at regional level and that impact the level of competitiveness of the Italian wine regions.

The relevance of the results provided by this study is well clear when considering that wine demand is moving fast so that supply shall catch-up quickly while it is constrained by different rigidities related to plant physiology and production structures and organization. In such a context, understanding the time path of the cultivation and its stickiness both at farm and aggregated level is a key tool for programming and managing supply timely and more effectively (Cusumano et al., 2010).

In this context, our results may be relevant to producers, producers' organizations, cooperatives and consortia, who are interested in assessing the medium-long run effects of their past and present cultivation choices. More in details, the proposed analysis allows to assess the time path of the changes that follow producers' decisions such as: to enlarge/reduce their vineyards, to change the cultivated varieties, to keep in production old plants/varieties, to explant the old vineyard for changing the training systems, and so forth. Also, policy makers may be interested in this assessment of the medium-long run evolution of the productive base in the wine sector (Meloni and Swinnen, 2016; Deconinck and Swinnen, 2015). In fact, this can contribute to ex-post evaluations of the effects of the EU policies that for many decades have been a major driving force in the sector. Last, the proposed approach and the results presented can help in framing also ex-ante evaluations of the possible future impacts of present policies or of future choices to be made at the national or regional level (Tóth and Végvári, 2016; Sardone et al. 2012).

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The Age Dynamics of Italian Vineyards: Factors Influencing Different Regional Trends

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Highlights

Research questions: What are the regional differences of the Italian trend in vine area? Which factors explain these differences? Are these differences related to the degrees of competitiveness of the Italian regions?

Methods: The age structure of the vineyards is analyzed based on a demographic balancing equation. The assessment of the factors influencing regional competitiveness relies on the estimate of a regression model.

Results: The age structure of regional vineyards and its dynamics. The rates of new plantations and of explantations (younger and older vines). Highlights on factors influencing the change at regional level.

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Focusing on the Italian wine sector, the paper analyses the evolution of vineyards and their age structure at regional level. The goal is to assess the different trends that feature the production base of the wine sector in the different Italian regions. Furthermore, factors that impact on these different regional trends are explored. The relevance of the goals of our study is based on the hypothesis that the different regional trends are related with the competitiveness of the product in the global markets, on the one side, and with the competitiveness of the sector in the use of resources at the local level, on the other side.

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