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Title

Farm size thresholds in adopting direct-to-consumer wine sales

I want to submit an abstract for:

Conference Presentation

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Keywords

on-farm wine sales
 off-farm wine sales
 size thresholds
 probit

Research Question

To investigate whether and how farm size plays a role in choosing direct sale channels for wineries.

Methods

Probit estimates on sub-samples split at different size thresholds, and search for Log-Likelihood maxima.

Results

The size threshold to choose direct sales is quite low for off-farm sales, the results for on-farm sales are much less clear-cut.

Abstract

The use of the direct marketing channels is an expanding trend in advanced economies. Notably in wine sector, direct sales (i.e. sales from wineries, farmers' markets and on-line sales) can be considered a crucial driver in order to cope with global challenges and achieve a competitive advantage (Fiore, 2016). Looking at food supply chains in general, producers selling directly can charge higher prices than when selling wholesale and thus receive higher revenues, but they may also have to bear higher distribution and marketing costs (Corsi et al., 2018a; Hardesty and Leff, 2010). As a consequence, profitability of direct marketing strategies strongly depend on many managerial and structural aspects, such as the type of direct channel used, type of product, farm size, or location (King et al., 2010; LeRoux et al., 2009; Ilbery and Maye, 2005). In particular, marketing related activities (e.g., processing, travel, selling, administration, promotion of products/channel etc.) are labour intensive and usually require farm managerial reorganisation. The main constraint to the adoption of direct channels seem to be labour availability and the possibility to strike a balance between production and

distribution activities. Under this point of view, farm size seems to play a decisive role in the availability of time and labour for marketing channel diversification and in particular for the possibility of undertaking off-farm sales (Novelli and Corsi, 2018). This is due to rigidities in the agricultural labour market preventing the hiring of waged labour forces in the desired quantity, and to the general preference for family labour, especially in such a delicate task as direct sales. Hence, farm size can be a constraint to the adoption of direct sales, since above a certain size family labour can become insufficient to cope with both the production and the selling activities.

The purpose of this paper is to investigate whether and how farm size plays a role in choosing direct sale channels for wineries. The empirical analysis concerns Piedmont, an administrative Region in the North-West of Italy, near the French border. Though traditionally an industrial area, Piedmont is - along with Tuscany - a key region for wine production and exports. But it is also a region where small and organic vineyards flourish and where wineries account the highest share of direct sales in comparison to other farm types. In Piedmont 24.3% and 13.6% of specialist vineyards type of farming sell respectively on-farm and off-farm, only surpassed by mixed farm types (Corsi et al., 2018b), and 27% of wine is sold direct-to-consumers (while fruits and vegetables barely exceed 10%, IMA 2006).

The analysis is based on data collected through the 2010 Agricultural Census using the regional data warehouse "CensimentoAGile", that allowed the analysis of Census individual farm records of the whole region. In 2010, the number of agricultural holdings in Piedmont was 67,148. Among this group we selected individual farms and group holdings (groups of natural persons), and farms types labelled as "specialised vineyards" ("quality wines", "non quality wines" and "other wineries") and "mixed crops and vineyards". To exclude hobby farming and self-consumption farms, farms with gross revenues from sales equal to zero were dropped. In the end, 12,892 farms were selected for the analysis. Of these, 2,926 made wine on-farm, of which 2,155 sold their wine on-farm, 1,212 off-farm, and 738 (included in the above) both on- and off-farm.

Based on this sub-sample, we tested the existence of some discontinuities in the effect of farm size, due, e.g., to some threshold in the Utilised Agricultural Area (UAA) to manage, and in the labour force in terms of number of household working members per hectare. We estimated probit models of the adoption of on-farm and off-farm direct sales as a function of farm size and of family labour/UAA. According to our hypothesis, the behavioural model should be different for wineries above and below the threshold. We made some experiments in this direction, by splitting the sample at given farm sizes and testing the difference between sub-samples. Likelihood ratio tests were employed to test whether the behaviour of the sub-sample below a given threshold was significantly different from the one of the sub-sample above the threshold, and comparing the log-likelihood of the split samples at different threshold to find the threshold that best represented the difference in behaviour. The first results suggest that the threshold is quite low (around 4 hectares) for off-farm sales, while the results for on-farm sales are much less clear-cut, and suggest a much higher threshold. This is consistent with the expectations, since off-farm sales are more labour-intensive and pose higher challenges to farmers to reconcile agricultural and sales activities.

We intend to enlarge the number of explanatory variables, including operators' socio-economic characteristics and other farm structural characteristics. In addition, we intend to test threshold based on family labour/UAA ratios.

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Farm size thresholds in adopting direct-to-consumer wine sales

Silvia Novelli, Alessandro Corsi

The use of the direct marketing channels is an expanding trend in advanced economies. Notably in wine sector, direct sales (i.e. sales from wineries, farmers' markets and on-line sales) can be considered a crucial driver in order to cope with global challenges and achieve a competitive advantage (Fiore, 2016).

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