



Farm succession, occupational choice and farm adaptation at the rural-urban interface: The case of Italian horticultural farms



Danilo Bertoni, Daniele Cavicchioli*

Department of Economics, Management and Quantitative Methods, The University of Milan, Via G. Celoria, 2-20133, Milano, Italy

ARTICLE INFO

Article history:

Received 24 March 2016
Received in revised form 21 June 2016
Accepted 1 July 2016
Available online 17 July 2016

Keywords:

Farm transfer
Farm migration
Young farmers
Peri-urban agriculture
Horticulture

ABSTRACT

The survival of family farming in Europe is a crucial issue, as it assures landscape maintenance in marginal areas and provides transmission and accumulation of site-specific knowledge in agricultural activity. Using data from a sample of Italian horticultural farms, we explored the multiple forces driving farm succession in a high value added sector. In addition to the traditional factors examined in the literature (farm, farmer and family features), we treated the farm transfer choice as the complement of the decision to migrate out of the agricultural sector, testing the effects of local labour market conditions (employment, income gap between farm and non-farm sector) and population density around the farm, as a proxy of rural-urban interface relationships. It has been shown that both traditional factors and territorial and labour market conditions influence the probability of farm succession. Interestingly labour market conditions exerted an effect in line with occupational choice theory only in less inhabited areas; in more densely populated regions a rural-urban linkage effect seems to prevail, creating an environment that fosters succession of young horticultural farmers. Peri-urban areas may thus be a favourable location for professional and specialised horticultural farms, as well as multifunctional and de-specialised ones, if their assets are properly protected against farmland subtraction. More generally, these findings confirm the validity of a more comprehensive approach toward farm succession, which takes occupational choice theory and rural-urban farm adaptation strategies into account.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

A substantial proportion of European farms is operated as family farms, where the farmer's household is directly engaged in business management. According to Eurostat, in 2013 about 30% of European farms were managed by a farmer aged 65 years or older and in some countries this figure is even higher, e.g. Spain (33%), Italy (40%) and Portugal (50%). In this demographic context farm survival is, at least in part, linked to the availability of a successor within the family. Lack of intra-family farm succession implies two major drawbacks: the loss of farm-specific knowledge which has accumulated within the family and an uncertain destiny of the assets (land) of the non-inherited farm (Carillo et al., 2013). It can be argued that in marginal areas such land is at high risk of abandonment and consequent environmental and territorial degradation (MacDonald et al., 2000; Corsi, 2009). However, even if in more productive areas the land owned by farms without successors may

be acquired by surrounding farms (thereby increasing their scale of production), it is not clear-cut whether such efficiency gains offset the loss of human capital and farm-specific knowledge. In any case, given the structure of European agriculture, the nature of the destiny of family farms (which depends on the outcome of the succession process) may have an impact on and implications for agricultural land use (Burton and Fischer, 2015; MacDonald et al., 2000; Raggi et al., 2013; Demartini et al., 2015; Paracchini et al., 2015; Bartoli et al., 2016). For these reasons, a growing international and academic interest in family farming (Wymann von Dach et al., 2013) has arisen. Family farm succession has been investigated by agricultural economists and social scientists from various perspectives. Some have examined the topic using qualitative analysis tools that are typically used in social sciences (Lobley et al., 2012; Dumas et al., 1995; Keating and Little, 1997; Mann, 2007b; Otomo and Oedl-Wieser, 2009; Inwood and Sharp, 2012; Gatè and Latruffe, 2015), whereas another strand of research has tackled this issue in a more empirical fashion using quantitative data and statistical inference, albeit from a different perspective. Some quantitative studies analysed the temporal relationship between retirement and succession (Kimhi, 1994; Kimhi and Lopez, 1999; Glauben et al., 2004), others examined the complex relationships between farm assets,

* Corresponding author.

E-mail addresses: danilo.bertoni@unimi.it (D. Bertoni), daniele.cavicchioli@unimi.it (D. Cavicchioli).

performances and succession (Calus et al., 2008; Carillo et al., 2013; Mann et al., 2013) and the effect of agricultural policies (Mishra et al., 2010).

In general, quantitative analyses have used binary dependent variable regression to explore factors affecting the probability of farm succession within the family. This approach isolates the effects of various farm, farmer and family factors on the probability of intra-family succession (Stiglbauer and Weiss, 2000; Kimhi and Nachlieli, 2001; Glauben et al., 2004; Simeone, 2006; Aldanondo Ochoa et al., 2007; Corsi, 2009; Glauben et al., 2009; Cavicchioli et al., 2015).

In this strand of literature, the effect on succession exerted by conditions around the farm has been rarely accounted for, with some notable exceptions (Glauben et al., 2004; Aldanondo Ochoa et al., 2007; Corsi, 2009). It is worth pointing out that if contextual factors do play a role in decisions about family farm succession, their exclusion from the analysis may lead to misinterpretation of the effects of other variables (farm, family and individual characteristics). In particular two categories of external factors have not been thoroughly examined in farm succession analysis: i) local labour market conditions, and ii) the effect of the degree of rurality or urbanisation and the consequent adaptation strategies adopted by the farms (namely the rural-urban interface effect). Interestingly, the effect of local labour market conditions has been instead examined in the occupational choice theory (Todaro, 1969; Mundlak, 1978; Barkley, 1990 and Larson and Mundlak, 1997), that studies a phenomenon complementary to farm succession, that is the migration out of the agricultural sector.

We also noted that previous farm succession studies have mainly followed a territorial approach, with data being collected on samples or populations of farms in a particular area, controlling for effects of farm size and specialisation in the analysis. To the best of our knowledge research on determinants of farm succession has rarely focused on a particular sector or type of farming, with few notable exceptions (Kerbler, 2008; Cavicchioli et al., 2015).

This paper moves beyond the existing literature from different viewpoints. Firstly we treat the choice of carrying on the family business as a complement to the decision to migrate out of the agricultural sector. To do so we plug the occupational choice theory into farm succession analysis, testing the effect of local labour market conditions.

Secondly, we also test the effect of population density around the farm, as a proxy of rural-urban interface relationships, comparing and contrasting the results with the literature on farm adaptation in peri-urban areas (i.e. Inwood and Sharp, 2012; Zasada, 2011; Zasada et al., 2011). We argue that the inclusion of the above mentioned variables provides a more comprehensive and accurate picture of family farm succession determinants.

Lastly, we examine traditional and new drivers of farm succession in a particular type of agricultural enterprises, namely horticultural farms, in Italy. This sector is peculiar with respect to the other agricultural branches as it is strongly oriented to innovation and highly integrated along the food supply chain.

The rest of the paper is organised as follows: Section 2 summarises the main literature on farm succession and briefly explains the occupational choice theory; Section 3 describes the horticultural sector in Italy, sample and variables and the methodology used in the analysis; Section 4 describes the main results, which are discussed in Section 5. Section 6 draws main conclusion and policy implications.

2. Literature

The literature on determinants of family farm succession indicates that three main categories of variables are important, namely

farm, farmer and farm household characteristics. The probability of succession increases with the physical and economic dimensions of the farm (Corsi, 2009; Mishra et al., 2010; Glauben et al., 2004; Aldanondo Ochoa et al., 2007), whereas the probability of succession appears to be negatively related to the proportion of rented land (Kimhi and Nachlieli, 2001; Glauben et al., 2009). Some studies have reported a positive linear relationship between farmer age and farm succession (Glauben et al., 2009; Kimhi and Lopez, 1999; Mishra and El-Osta, 2008; Mishra et al., 2010), whereas others have detected a non-linear bell-shaped effect of farmer age (Corsi, 2009; Glauben et al., 2004; Kimhi and Nachlieli, 2001; Stiglbauer and Weiss, 2000) with the notable exception of Aldanondo Ochoa et al. (2007), that found a u-shaped relationship. Whilst empirical evidence is consistent with respect to the positive effect of female farm-holders on farm succession, evidence on the effect of farmer educational level is discordant: in some studies, the probability of succession increases with farmer educational level but others report an opposite relationship (Corsi, 2009; Mishra et al., 2010). The evidence on the effect of off-farm labour on succession is puzzling; a negative association was reported in two studies (Simeone, 2006; Stiglbauer and Weiss, 2000) and a positive association in two others (Kimhi and Lopez, 1999; Corsi, 2009). All the studies found higher probabilities of succession associated to male heirs in the family farm. Aldanondo Ochoa et al. (2007) and Cavicchioli et al. (2015) reported that potential heirs' educational level was negatively associated with probability of succession. Finally, a large age gap between the farmer and his/her children depresses the probability of succession (Kimhi and Nachlieli, 2001; Glauben et al., 2009).

Along with internal factors (farm, farmer and family features) environmental or contextual factors may also affect the likelihood of intra-household succession. These factors include the interplay between farm and territorial factors (rural-urban relationships) and the opportunity cost associated with finding alternative employment in non-agricultural sectors. The effect of these factors on succession has received scant attention, with the notable exceptions of studies by Aldanondo Ochoa et al. (2007), Glauben et al. (2004) and Corsi (2009). Aldanondo Ochoa et al. found that the probability of farm succession reduces as the distance of the farm from the nearest urban centre increases. Corsi found that higher employment rates reduced the probability of succession, whilst the size of the agricultural sector was positively associated with probability of succession. Using these variables to explain farm succession is of particular interest if farm succession is viewed as the counterpart of labour migration from the agricultural sector. In other words, intra-family succession can be seen as an outcome of occupational choice. According to occupational choice theory (Todaro, 1969; Mundlak, 1978; Barkley, 1990; Larson and Mundlak, 1997) farm household members decisions about whether to remain in farming or to leave the sector are based on considerations that maximize their expected utility; in particular, the decision is influenced by the income difference between agriculture and other sectors and by the probability of finding an alternative job (in another sector) as well as by individual and farm factors. Following this line Olper et al. (2014) investigated how Common Agricultural Policy (CAP) payments influenced farm labour migration in EU regions, controlling for local labour market conditions (unemployment and labour share of agriculture), population density and the income difference between agriculture and other sectors. Interestingly it emerged that all of these control variables played a role in decisions about remaining in or leaving the agricultural sector. With the exception of income difference the same variables were also shown to affect off-farm labour choices in Canada (Alasia et al., 2009). Consequently, we think these contextual

Download English Version:

<https://daneshyari.com/en/article/6547132>

Download Persian Version:

<https://daneshyari.com/article/6547132>

[Daneshyari.com](https://daneshyari.com)