

Towards better tailored new entrant support in European agriculture: Analysing the differences between family successors and newcomers

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ABSTRACT

New entrants, including both family successors and newcomers, are essential to addressing challenges in European agriculture and contributing to rural development. However, the differences between these two groups have not been thoroughly explored, which may hinder the effectiveness of support policies. We aimed to determine whether family successors and newcomers require distinct support schemes for agricultural and rural development. A quantitative online survey across several European countries tested five hypotheses regarding the differences between the two groups. A regression model was used to determine whether differentiation in support is necessary. Based on the results, we found that the feeling of being “established” as a farmer is influenced by the mode of entry—whether as a family successor or a newcomer. The two groups differ in their contributions to agriculture and rural development, as well as in their dependency on public support. These differences underscore the importance of considering entry methods when designing support schemes. The results suggest that the efficiency of new entrant support could be strengthened by tailoring schemes that take into account the specific entry methods of farmers. Future research should focus on exploring the scalability of business models of newcomers to assess their potential quantitative contributions to overall agricultural production.

1. Introduction

Generational renewal is a major challenge being faced by European agriculture (Zagata and Sutherland, 2015; Coopmans et al., 2021; Borda et al., 2023). The sector also faces persistent demands to transform toward greater sustainability (EC, 2019; EC, 2020) while fostering an innovative, diverse, and youthful workforce to strengthen rural societies and economies (Nowack et al., 2023). New entrants are increasingly recognised as pivotal to addressing these issues (Zagata and Sutherland, 2015). Beyond replacing retiring farmers, they often introduce innovative practices and sustainable business models (Koutsou and Partalidou, 2012; EIP-AGRI, 2016; Taherzadeh, 2019). Moreover, their presence counteracts rural ageing, urban migration, and homogenisation by bringing diverse skills, networks, and values to rural communities (Monllor i Rico and Fuller, 2016). Understanding their specific challenges, needs, and support mechanisms is crucial.

Despite their importance, no universally accepted definitions exist for new entrants in agriculture, including age thresholds, the maximum age of a new entrant farmer, or the time required to transition from a new entrant to an established farmer. Differentiating types of new entrants is essential for shaping targeted policy support. This study contributes to the characterisation and differentiation of new agricultural entrants. According to the EIP-AGRI focus group discussion (EIP-AGRI, 2016) and Helms et al. (2019), the term “new entrant farmer” encompasses both family successors and newcomers. Family successors inherit farms or parts of them from their families, while newcomers establish new agricultural businesses or acquire farms through non-family connections (EIP-AGRI, 2016). Zagata et al. (2017) emphasised that both types play vital roles in generational renewal and sustainability transformations, contributing to the resilience of rural societies and economies in European agriculture.

Considering the potential differences between family successors and

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newcomers regarding contributions and requirements is crucial for designing individualised and need-based support for new entrants. According to Zagata et al. (2017), this is an important prerequisite for improving new entrant support. Existing research has explored the motivations and challenges faced by new entrant farmers (Katchova and Ahearn, 2016; Borisov et al., 2019; Jack et al., 2019; Grubbström and Joosse, 2021), farm succession (Anwarudin et al., 2019; May et al., 2019 and Breitenbach and Foguesatto, 2023), and gender relations in succession (Sheridan et al., 2023; Downey and Clune, 2023; Gawel et al., 2024). Studies have also examined the impact of young farmers' support measures on new entrants' success (Koutsou et al., 2014; Schimmenti et al., 2014; Bournaris et al., 2016; Carlisle et al., 2019; Kan et al., 2019; Balezentis et al., 2020; Gilbert and Plaingram and Kirwan, 2011–Julian, 2021; Borychowski et al., 2023) and niche agricultural models (Ingram and Kirwan, 2011; McDonald et al., 2013; McDonald et al., 2014; Bruce, 2019; López-García and Carrascosa-García, 2024). Additionally, support ideas for career changers as a subtype of newcomers have been proposed (Zabko and Tisenkopfs, 2022). However, to date, no quantitative studies have examined the potential differences between family successors and newcomers.

Through this exploratory study, we aimed to investigate whether distinguishing between these two entrant groups—family successors and newcomers—in new entrant support measures is beneficial and necessary regarding each group's requirements. A quantitative online survey conducted across several European countries provided the dataset. The study employed a regression model to assess the need for differentiation between the two groups and used chi-square and Mann–Whitney U tests to estimate differences in requirements and contributions. Specifically, it investigated (i) the distinguishing factors between newcomers and family successors, (ii) differences in their potential contributions to agriculture and rural societies, and (iii) variations in their support needs for government schemes.

The sections below provide a literature review, first discussing the role of new entrants in European agriculture and rural development, followed by potential improvements in new entrant support. Based on this, hypotheses regarding differences between family successors and newcomers are formulated. The Materials and Methods (Section 3) section outlines the research approach, followed by the presentation and discussion of results. The final section summarises key findings and initial policy implications.

2. Literature review and hypotheses

2.1. New entrants in European agriculture and rural development

In 2020, only 12 % of farm managers in the European Union (EU-27) were under 40 years old, while more than 33 % were over 65 years. However, age distribution varied among member states. In France, 18 % of farm managers were under 40, and 13 % were over 65, whereas in Spain, only 8 % were under 40, and 41 % were over 65 (Pascher et al., 2024). The role of new entrants in shaping the future of European agriculture is widely recognised in research and policy. Beyond addressing the ageing farm workforce, new entrants have considerable potential to drive the transition toward a more sustainable agri-food system (Csizmadý et al., 2021; Gall et al., 2023; Liu et al., 2023). They also help counter the trend of fewer, larger farms, which can have negative social impacts on rural communities across Europe (Nowack et al., 2023; Gittins and McElwee, 2023).

In addition to farm numbers and sizes, organisational structures vary. In 2020, 3 % of EU-27 farms operated as legal entities, managing 25 % of the total utilised agricultural area. In France, 30 % of farms operated as legal entities, compared to only 1 % in Romania (Pascher et al., 2024). The economic significance of agriculture also differs across member states. In 2023, agriculture contributed 2 % to the EU-27's gross value added (GVA) and 4 % to employment. In France, agriculture accounted for 2 % of GVA and employment, while in Romania, it

contributed 4 % to GVA and 21 % to employment. Since only primary production is considered here, its influence on subsequent stages of the value chain is even greater (Pascher et al., 2024).

Taherzadeh (2019) found that young entrant farmers are particularly motivated by sustainable agricultural practices. They bring fresh skills, perspectives, energy, and professional management to the sector (Kontogeorgos et al., 2014; Chatzitheodoridis and Kontogeorgos, 2020). Additionally, Pindado et al. (2018) highlighted their entrepreneurial mindset, long planning horizons, and intensive investment in their businesses (Davis et al., 2013). Furthermore, new entrants influence farms even before formally taking over, as their anticipated succession drives diversification, cooperation, and technology adoption strategies of farmers with successors (Bertolozzi-Cardio, 2024).

2.2. Considerable potential for improving new entrant support

Several studies have analysed the effectiveness of past policy support measures for new entrants in agriculture. Price et al. (2022) argued that support schemes under the CAP have had limited success because they address only entry into farming while neglecting the equally important issue of exit. Adamowicz and Szepeluk (2016) emphasised the need to address the problems faced by young farmers in conjunction with broader socioeconomic issues in rural areas.

Šimpachová, Pechrová and Šimpach (2020) found that young farmers in the Czech Republic viewed top-up direct payments as ineffective. Sivini and Vitale (2023) highlighted the need for policies that better support new entrants in rural Italian areas by facilitating the adoption of innovative agro-ecological and multifunctional farming approaches. Swain and Hamza (2023) identified farm succession as a challenge for which farmers are often inadequately prepared and advised. An evaluation of the impact of the 2014–2019 CAP on generational renewal recommended adopting a more holistic and strategic approach, with a stronger focus on new entrants and innovation (Dwyer et al., 2019). Eistrup et al. (2019) also found that policy support measures for young farmers were inefficient in promoting generational renewal. Pindado et al. (2018) further suggested that the unique needs of new entrants call for tailored education, training programs, and targeted policy measures.

2.3. Potential differences between family successors and newcomers

When examining new agricultural entrants, two key distinctions of farmers must be considered. First, farmers can be categorised as either new entrant farmers or established farmers. Second, they can be classified as family successors and newcomers. As mentioned in the Introduction, widely accepted definitions of new entrant farmers, such as a maximum age limit or the time frame after which they are considered established, are absent. In contrast, family successors and newcomers are clearly defined: family successors take over a farm or part of a farm from their family, while newcomers start agricultural businesses or acquire farms through non-family connections (EIP-AGRI, 2016). According to the EIP-AGRI focus group discussion (EIP-AGRI, 2016) and Helms et al. (2019), the term “new entrant farmer” encompasses both family successors and newcomers. Therefore, new entrant farmers are not necessarily young (Hopkins et al., 2020).

Beyond Europe, Chen et al. (2021) found that only half of the new entrant farms in Canada remained in operation 5 years after the next census. This suggests that a significant number of new entrants may leave agriculture before becoming established (Chen et al., 2021). In rural communities, the stage of establishment, the likelihood of remaining in agriculture, and contributions to local communities are interdependent (Greve, 1995; Akgün et al., 2010; Steiner and Atterton, 2015; Burdon et al., 2022). Only those new entrants who are already integrated into rural networks can make sustainable contributions to local communities (Greve, 1995; Akgün et al., 2010; Burdon et al., 2022). Furthermore, new entrants who are established within rural

networks are more likely to sustain their agriculture ventures (Greve, 1995; Akgün et al., 2010; Wiles and Jayasinha, 2013; Burdon et al., 2022).

Thus, achieving financial and social establishment may be crucial in preventing early exits from the agricultural sector. Newcomers, who enter agriculture without prior exposure, often start businesses from scratch and lack established professional and social networks. In contrast, family successors benefit from cost-neutral inherited farm infrastructure, years of personal experience, and established regional networks within the agricultural sector and locally (EIP-AGRI, 2016; Helms et al., 2019). Based on these insights, it can be hypothesised that newcomers face greater challenges in becoming established (see Fig. 1). Thus, the following hypothesis is proposed.

H 1. The method of entry into farming influences self-assessment of agriculture establishment.

The potential differences between family successors and newcomers have received little attention in the literature. The following four hypotheses, derived from existing qualitative studies, explore these differences. Newcomers are often seen as initially disconnected from traditional agricultural knowledge systems and mainstream marketing channels (Sutherland et al., 2015; Hassink et al., 2016). However, they actively seek integration into local networks while leveraging their prior career networks and management practices. These external networks can create new marketing opportunities (EIP-AGRI, 2016; Sutherland and Calo, 2020) and promote diversification and innovation in the agricultural sector (Sutherland et al., 2015).

New entrants span various farm sizes, types, and production methods. While family succession remains the most common pathway into farming, many newcomers are entering the field (Helms et al., 2019). Although they represent a niche segment, newcomers bring technological and social innovations along with entrepreneurial thinking (EIP-AGRI, 2016). Newcomers tend to be more innovative and engaged in alternative and value-added farming activities than family successors (EIP-Agri, 2016; McKillop et al., 2018). Furthermore, Hamilton et al. (2015) found that newcomers exhibit greater entrepreneurial innovativeness than family successors. Thus, the following hypothesis is proposed (see Fig. 1).

H 2. The heterogeneous backgrounds of newcomers result in more multilayered objectives to family successors.

Over 30 years ago, Symes (1990) described farming as a closed profession due to the significant resources required for commercial success. More recently, Szymkowiak and Rhodes-Reese (2022) highlighted that entry into agriculture is constrained by natural, physical, financial, human, and social capital. New entrants generally face various challenges such as securing land, capital, labour, housing, knowledge, and networks, with access to land being the most significant challenge, especially for newcomers (Zagata et al., 2017; McKee et al., 2018; Helms et al., 2019; Skrzypczynski et al., 2021). Agricultural knowledge is another key challenge, as newcomers often lack the production skills gained through parental farm experience and may struggle with regulatory requirements (EIP-AGRI, 2016). The takeover process itself can also present challenges (Helms et al., 2019).

Considering the challenges and needs of family successors and retiring farmers, the takeover process can be complex (Helms et al., 2019). Lobley et al. (2010) and Kerbler (2012) highlight the importance of careful planning for family farm succession. During and after succession, ensuring adequate income for both retiring farmers and successors can be difficult (Helms et al., 2019). In contrast, newcomers require significant start-up capital to acquire production facilities and equipment or invest heavily in leasing them. They must adopt individualised entry and business models to succeed (Helms et al., 2019). Family successors typically continue existing farm activities with no or limited adaptations. Their business strategies depend on their risk affinity, openness to change, and the farm's status at takeover, as well as their ability to invest time and capital for development (Helms et al., 2019; Graskemper et al., 2022). Traditionally, they leverage their family's land capital to secure funding for new investments (EIP-AGRI, 2016). A Dutch survey by Van der Meulen et al. (2015) found that family successors seek opportunities for expansion and innovation. Because of the resources available to them, business adjustments are often less challenging for family successors. Newcomers lacking such resources typically focus on niche markets (Helms et al., 2019). Thus, the following hypothesis is proposed (see Fig. 1).

H 3. Despite shared challenges, the requirements of newcomers and family successors differ.

Within the CAP framework, support for new entrants was provided under both funding pillars during 2014–2022 (May et al., 2019). The most significant support in the second pillar was Measure 6, which offered business start-up aid for young farmers (Zagata and Sutherland,

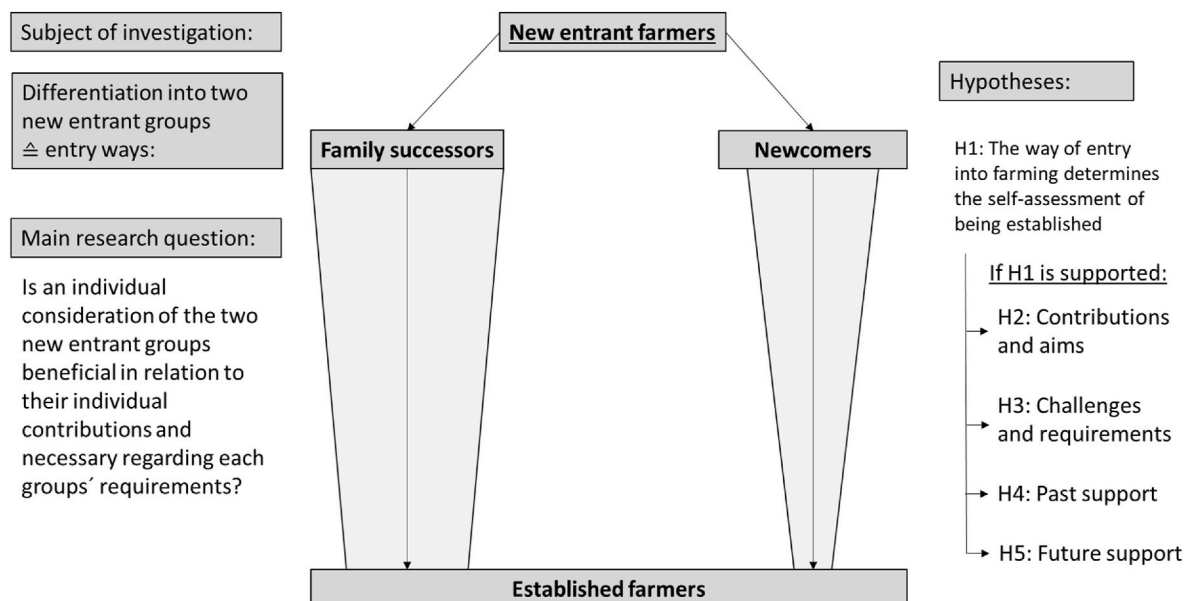


Fig. 1. Framework to investigate the differences between family successors and newcomers.

2015). However, the availability and conditions of this measure depend on national regulations, limiting access for some new entrants to the European Union. In the first pillar, the primary policy instrument for generational renewal was the Young Farmer Payment (May et al., 2019). Young farmers meeting the required criteria received a top-up direct payment for an area of up to 90 ha (Tropea, 2016). Consequently, European support for new entrants under the CAP framework was structured as area-dependent, fixed-term direct payments. These policies have faced criticism regarding their effectiveness (May et al., 2019). In addition, tailored entrant support is recommended (Zagata et al., 2017). Zabko and Tisenkopfs (2022), for instance, suggested creating professional networks for career changers transitioning into farming from different occupational and educational backgrounds, who often lack tailored advice. Considering the perspectives of both new entrant groups, the following hypothesis is proposed (see Fig. 1).

H 4. Compared to family successors, newcomers assess past government's support for new entrants differently.

Given potential disparities in support, the next hypothesis is proposed.

H 5. Newcomers are more supportive of potential new schemes for generational renewal than family successors.

In summary, this study explores the role of new entrants in generational renewal and the development of innovative, diverse, and youthful agricultural communities. To enable their long-term establishment, tailored support is crucial. Farmers can be classified by their entry method—either as family successors or newcomers. These differing entry conditions influence the establishment process (see H 1). Both groups contribute uniquely to agriculture and rural communities (see H 2). Their distinct challenges and needs require customised support measures to sustain them in the sector and their communities (H 3). Past governmental support has been inadequate and should be addressed through innovative policies (see H 4 + 5 and Fig. 1).

3. Materials and methods

3.1. Data collection

Within the framework of the European Horizon 2020 Networking Project, an extensive online survey focusing on new entrant issues was conducted in 2021. The project involved a wide range of European stakeholders. A registration system was available on the project website, enabling interested individuals to join an international network. During registration, members provided their contact details and consented to receive project materials and information. In total, 680 individuals registered. The online survey was distributed via email using the project network, which included ten partner organisations in nine European countries, namely Belgium, Bulgaria, France, Germany, Ireland, the Netherlands, Portugal, Slovenia, and the United Kingdom. The survey was not personalised and disseminated further. The survey period covered 1 month from September 13 to October 13, 2021.

Three stakeholder groups participated in the survey: (1) new entrants, (2) established farmers, and (3) supporting stakeholders, such as advisors, scientists, and association members. No definitions were provided for differentiating “new entrants” and “established farmers” to analyse how the two groups self-identified. The survey was created and distributed using Qualtrics (an online survey software) and translated into the partner countries' national languages. After removing incomplete responses, the final sample included 309 participants.

The survey covered three categories: (1) participants' sociodemographic characteristics, (2) personal traits, and (3) assessments of new entrants in agriculture. Sociodemographic questions included variables such as self-identification as an established farmer or new entrant, time in this role, and prior professions before farming. Motivations for starting farming and the importance of support payments were

addressed under personal traits. The third category evaluated new entrants' aims, challenges, advice and financial support needs, the importance of support payments, and current/future European governmental support measures for generational renewal in farming (see Supplementary Material: Questionnaire).

Given the survey's focus on new entrants and its distribution through new entrant networks, the sample had an average age of 41 years (see Table 1). Distribution channels via networks involving universities resulted in 85 % of participants holding a university degree (see Table 1). This bias must be acknowledged in analyses of generalisability. A regression model examined sociodemographic variables (see Section 3.2). Two pathways into farming divided participants into family successors and newcomers, resulting in a subsample of 101 (see Table 1). As the first exploratory quantitative study, it investigated differences between these groups.

The subsample included 52 newcomers and 49 family successors. Participants were on average 38 years old; 44 % were female, and 56 % were from Germany. Of these, 63 % held agricultural qualifications, and 74 % had a university degree. Within the subsample, 52 self-identified as new entrants, whereas 49 self-identified as established farmers. All subsample farmers had been in their roles for an average of 9 years, while new entrants specifically averaged 4 years (see Table 1).

3.2. Calculations

For the calculations, only the data from the subsample (N = 101) were used. Three analytical approaches were applied. First, a regression model assessed whether distinguishing between the two groups of new

Table 1
Interviewees' socio-demographic characteristics.

Variable	N = 309	N = 101
age (years)	41.4	37.7
Frequency <31 years old	64	30
Frequency 31–41 years old	106	43
Frequency 42–52 years old	74	17
Frequency >52 years old	65	11
Woman (frequency); (0 = not female; 1 = female)	144	44
Country Germany (frequency); (0 = other ^a ; 1 = Germany)	138	56
University degree (frequency); (0 = no; 1 = yes)	264	74
Agricultural education (frequency); 0 = no; 1 = yes)	192	63
Primary role agriculture (frequency); (0 = other ^b ; 1 = agriculture)	124	–
Thereof new entrants (frequency)	63	–
Primary or secondary role agriculture (frequency); (0 = other ^b ; 1 = agriculture)	170	–
Thereof new entrants (frequency)	84	–
Entering way: newcomer (frequency); (0 = family successor; 1 = newcomer)	–	52
New entrants (frequency); (0 = established farmer; 1 = new entrant farmer)	–	52
Ø age of new entrants (years)	–	33.9
Frequency <30 years old	–	18
Frequency 30–34 years old	–	9
Frequency 35–39 years old	–	17
Frequency >39 years old	–	8
Ø time in the role as a new entrant (years)	–	4.0
Frequency <3 years	–	16
Frequency 3–4 years	–	12
Frequency 5–6 years	–	16
Frequency >6 years	–	8
Ø time in role as a new entrant or established farmer (years)	–	9.2
Frequency <5 years	–	30
Frequency 5–9 years	–	36
Frequency 10–14 years	–	14
Frequency >14 years	–	21

^a Other countries: Belgium, Bulgaria, France, Ireland, Netherlands, Portugal, Slovenia, and the United Kingdom.

^b Other roles: agricultural advisor, finance/insurance, researcher, educator, media, non-governmental organisation, and other.

entrant farmers—family successors and newcomers—was necessary, validating prerequisites for subsequent analysis. The dichotomous variable “primary role” (coded as 0 = “established farmer” and 1 = “new entrant farmer”) was analysed using a binary probit regression model. The probit model evaluated the effect of sociodemographic variables (control variables [C]) and entry process variables (H 1), predicting the probability of being a new entrant farmer. Only quantitative variables served as explanatory variables (Table 2). Exploratory variables were selected to (1) assess the influence of socio-demographic variables on generalisability, (2) characterise new entrants, and (3) evaluate the need to distinguish between family successors and newcomers.

After verifying the prerequisites for distinguishing between family successors and newcomers, chi-square and Mann–Whitney U tests were used to compare differences between the two groups regarding contributions and requirements. We used chi-square tests for nominally scaled variables and Mann–Whitney U tests for ordinally scaled variables. No expected cell frequencies of nominal variables were below five (see Table A.2). Distributions differed significantly between groups for all ordinal variables (Kolmogorov–Smirnov $p < .05$; see Table A.3).

4. Results and discussion

4.1. Descriptive statistics

In the full sample ($N = 309$), the most frequent aims of new entrant farmers were “innovation/regeneration of agriculture” (63 %) and “food production” (61 %), followed by “environmental stewardship” (40 %) and “maintaining legacy and heritage” (40 %). The majority of participants (62 %) rated current (2021) European governmental support for generational renewal as “very poor” or “poor”, with national/regional support rated even lower. Over 77 % deemed European support payments critical for new entrants’ success, though 12 % reported “no support payments” in their area. In the subsample ($N = 101$), new entrants were on average 34 years old and had 4 years of experience in their role (see Table 1 and Table A.1 [detailed sample description]).

4.2. Results probit model

The binary probit regression model was statistically significant, $\chi^2(7) = 78.308$, $p < .001$, with 86.1 % overall classification accuracy. Variables with $p < .05$ were interpreted. Of seven variables, two significantly predicted new entrants: entry method ($p = .039$) and time in role ($p < .001$) (see Table 3). Sociodemographic control variables (age, gender, education, nationality) showed no significant effects, suggesting self-assessment as new entrants was unaffected by these

factors. Newcomer entry increased the likelihood of identifying as a new entrant (Exp (B) = 2.280, 95 % CI [1.034, 5.025]), while longer tenure reduced it (Exp (B) = .695, 95 % CI [.592, .816]). Entering as a newcomer raised the probability of feeling “not established” by 14 % (average marginal effect: .1394).

H 1: The probit model provides evidence supporting H 1, suggesting that feeling “established” as a farmer depends not only on years of experience but also on the entry path—whether as a family successor or a newcomer. The literature review highlights two key benefits of early establishment: preventing the rapid exit of new entrant farmers from the agricultural sector and facilitating their integration into rural societies, enabling meaningful contributions to rural communities (see Section 2). These findings underscore the need to characterise the potential type-dependent differences between family successors and newcomers, which may influence their distinct establishment processes.

4.3. Differences between family successors and newcomers

The differences between family successors and newcomers are analysed by presenting and discussing the results of the chi-square and Mann–Whitney U tests related to the hypothesis (H 2–5):

H 2: Results show a significant difference ($p < .05$) between the two types of farmers—family successors and newcomers—and their previous professions, $\chi^2(1) = 15.051$, $p < .001$, $\phi = .386$ (see Table 4 and Table A.2). These findings support H2, indicating that newcomers are more likely to have a previous profession outside the agricultural sector. This suggests a high probability that newcomers introduce skills, ideas, practices, and networks from other industries into farming and rural communities, thereby increasing the likelihood of technical and social innovations. This aligns with findings on the availability of non-agricultural networks (Sutherland et al., 2015) and the lack of production skills associated with newcomers (EIP-AGRI, 2016). Future support programs could benefit from focusing on the effective application of ideas and networks from other sectors.

Results also reveal significant differences ($p < .05$) between the two types of farmers regarding their motivations for entering farming. Significant differences were found in motivations related to improving the environment, $\chi^2(1) = 10.199$, $p = .001$, $\phi = .318$, and changes in life aspirations, $\chi^2(1) = 7.488$, $p = .006$, and $\phi = .272$.

Additionally, five variables related to the aims of new entrants show significant differences ($p < .05$) between family successors and newcomers: innovation/regeneration of agriculture, $\chi^2(1) = 8.381$, $p = .004$, and $\phi = .288$; food production, $\chi^2(1) = 10.812$, $p = .001$, $\phi = -.327$; maintaining legacy and heritage, $\chi^2(1) = 9.557$, $p = .002$, $\phi = -.308$; diversification into other farming systems, $\chi^2(1) = 8.855$, $p = .003$, $\phi = .296$; and providing job opportunities, $\chi^2(1) = 7.223$, $p = .007$, $\phi = .267$ (see Table 4 and Table A.2).

These findings support H 2, suggesting that newcomers are more likely to have higher environmental ambitions, while family successors tend to focus on production outcomes. This could be attributed to family successors’ desire to maintain the legacy and heritage of their family farms across generations, whereas newcomers may be driven by personal aspirations and ambitions.

For governmental institutions, tailoring support programs with distinct emphases—focusing on preserving family traditions for successors and emphasising environmental protection for newcomers—may be beneficial. Furthermore, newcomers may have stronger ambitions to innovate and regenerate agriculture, aligning with previous findings that they introduce technological and social innovations, as well as new entrepreneurial thinking, into the farming sector (EIP-AGRI, 2016). This could also be influenced by the fact that essential production resources are often more limited for newcomers.

H 3: For the respective sample, results indicate a significant difference ($p < .05$) between family successors and newcomers regarding the challenge of access to land, $\chi^2(1) = 10.524$, $p = .001$, and $\phi = .323$. However, no significant differences were found for other challenges

Table 2
Explanatory variables of the regression model (description and coding).

Hypothesis	Variable	Description	Coding
<i>Sociodemographic variables</i>			
C	Age	Age in years	Number years
	Gender	Gender female	0 = not female; 1 = female
	Country	Country Germany	0 = other ^a ; 1 = Germany
	University degree	University degree	0 = no; 1 = yes
	Agricultural education	Qualification in relation to agriculture	0 = no; 1 = yes
<i>Variables regarding the entering process</i>			
H 1	Entering way	Way of entering farming	0 = family successor; 1 = newcomer
	Time in role	Time in agriculture in years	Number years

^a Other countries: Belgium, Bulgaria, France, Ireland, Netherlands, Portugal, Slovenia, and the United Kingdom.

Table 3
Explanatory variables of the regression model (coefficients).

Hypo-thesis	Variable	Coefficient B	P-value	Exp (B)	95 % Wald confidence interval for Exp (B)		Average marginal effect
					Lower	Upper	
Sociodemographic variables							
C	Age	-.003	.900	.997	.954	1.043	-.0005
	Gender	.463	.273	1.589	.691	3.653	.0784
	Country	-.172	.706	.842	.334	2.119	-.0291
	University degree	-.713	.144	.490	.189	1.270	-.1207
	Agricultural education	.796	.114	2.217	.807	6.089	.1347
Variables regarding the entering process							
H 1	Entering way	.824	.039	2.280	1.034	5.025	.1394
	Time in role	-.364	<.001	.695	.592	.816	-.0615

Table 4
Results and effect strengths of Chi-square tests.

Hypo-thesis	Variable	Pearson-chi-square	Df	p (two-sided; Pearson)	Phi (ϕ)
H 2	Previous profession	15.051	1	< .001	.386
<i>Own primary motivations for starting with farming (up to three choices); (0 = no; 1 = yes)</i>					
H 2	“work outdoors/in a rural area”	.006	1	.937	–
	“produce food”	.309	1	.578	–
	“work with animals”	.775	1	.379	–
	“improve environment”	10.199	1	.001	.318
	“change in life aspirations”	7.488	1	.006	.272
	“create new products using innovative approaches”	.724	1	.395	–
<i>Assessments on the most important aims of new entrant farmers (up to three choices); (0 = no; 1 = yes)</i>					
H 2	Innovation/regeneration of agriculture	8.381	1	.004	.288
	Food production	10.812	1	.001	-.327
	Environmental stewardship	.202	1	.653	–
	Maintaining legacy and heritage	9.557	1	.002	-.308
	Diversification into other farming systems	8.855	1	.003	.296
	Providing job opportunities	7.223	1	.007	.267
<i>Assessments on the main challenges facing new entrant farmers (up to three choices); (0 = no; 1 = yes)</i>					
H 3	Lack of finance/low income	.302	1	.582	–
	Lack of access to land	10.524	1	.001	.323
	Competition with more established farmers	.058	1	.809	–
	No network/community	.526	1	.468	–
	No background knowledge of farming	.731	1	.392	–
	High production costs	.012	1	.912	–
	Climate change	.159	1	.690	–
	No access to labour	.385	1	.535	–
<i>Assessments on the most important types of financial support for new entrants (up to three choices); (0 = no; 1 = yes)</i>					
H 3	Education and training	10.235	1	.001	.318
	New equipment	18.590	1	< .001	.429
	Diversification into other farming systems	1.588	1	.208	–
	New technology	10.808	1	.001	-.327
	Highest standard production level	1.994	1	.158	–
	Environmental measures/ecological certification	.172	1	.678	–
	Legal	.162	1	.688	–
	Diversification into non-farming systems	.526	1	.468	–

faced by new entrant farmers (Table 4 and A.2). These results support the first part of H 3, suggesting that while both types of new entrants face similar challenges, access to land is a greater obstacle for newcomers than for family successors.

Furthermore, results show significant differences ($p < .05$) between the two types of farmers regarding their most important types of financial support in three areas: education and training, $\chi^2(1) = 10.235$, $p = .001$, $\phi = .318$; new equipment, $\chi^2(1) = 18.590$, $p < .001$, $\phi = .429$; and new technology, $\chi^2(1) = 10.808$, $p = .001$, $\phi = -.327$ (see Table 4 and Table A.2).

Newcomers are more likely than family successors to prioritise education, training, and new equipment as essential financial support. In contrast, family successors are more likely to prioritise “new technology”. These results support the second part of H 3.

Supporting this, Helms et al. (2019) concluded that newcomers often require substantial start-up capital to purchase or lease production facilities. Consequently, newcomers may enter the agricultural sector with strong motivation but limited resources. However, their previous professional experience increased the likelihood of introducing new ideas, innovations, and networks into the sector and rural communities. Even with limited resources, their minimalist production infrastructure could foster resource-efficient solutions and sustainability transformations.

In contrast, family successors may need support to manage ongoing transformation processes within their inherited farms. They work with fixed farm structures that need significant effort and time to adapt for future resilience. As a result, family successors have diverse needs depending on their specific farms, leading to relatively similar ratings for the most important types of financial support. Compared to newcomers, family successors benefit from existing production facilities, but these structures are harder to modify. This makes it more challenging for family successors to respond to political, economic, social, and climatic changes. The need for greater flexibility in adapting established farm structures should be considered when designing support programs for family farmers.

H 4: For the respective sample, a statistically significant ($p < .05$) difference exists in past governmental support at the European level between family successors (MRank = 59.85) and newcomers (MRank = 42.66), $U = 840.500$, $Z = -3.293$, $p < .001$, $r = -.328$ (see Tables 5 and 6 and Table A.3). Descriptive statistics show that newcomers were more dissatisfied with the general European government support for generational renewal in 2021. These results support H 4, indicating that, compared to family successors, newcomers were insufficiently supported by past policies. This is likely due to the link between young farmers’ payments and agricultural areas. However, family successors also rated past support for generational renewal as poor, highlighting the need for clear policy responses.

H 5: Results show significant differences ($p < .05$) between the two types of farmers regarding assessments of four variables for future funding schemes: investment funding, startup bonuses, social insurance subsidies, and privileged access to land (see Table 5). Descriptive statistics reveal that newcomers favoured all four variables (Table 6 and A.3). The results support H 5, indicating that newcomers prioritise these

Table 5

Results of Mann–Whitney U tests.

Hypothesis	Variable	U	Z	p (asymmetric)
<i>Assessment of the general, current (2021) level of governmental support for generational renewal in farming (Likert scale: 1 = very poor; 5 = excellent)</i>				
H 4	Past governmental support: European level	840.500	−3.293	< .001
<i>Assessments on new support schemes for new entrants in the future (Likert scale: 1 = strongly disagree; 4 = strongly agree)</i>				
H 5	Investment funding	1.011.000	−2.009	.045
	Expansion of education and learning opportunities	1.185.000	−.691	.490
	Start-up bonus	857.000	−3.147	.002
	New business models	1.166.500	−.831	.406
	Networking support	1.238.000	−.280	.780
	Tax concessions	1.090.500	−1.391	.164
	Social insurance subsidy	986.000	−2.316	.021
	Privileged access to land	752.500	−3.723	< .001

Table 6

Descriptive statistics and effect strengths of Mann–Whitney U tests.

Hypothesis	Variable	Entering way	Median rank	Normal distribution (Kolmogorov–Smirnov p)	r (Pearson)
<i>Assessment of the general, current (2021) level of governmental support for generational renewal in farming (Likert scale: 1 = very poor; 5 = excellent)</i>					
H 4	Past governmental support: European level	Family successor	59.85	.003	−.328
		Newcomer	42.66		
<i>Assessments on new support schemes for new entrants in the future (Likert scale: 1 = strongly disagree; 4 = strongly agree)</i>					
H 5	Investment funding	Family successor.	45.63	.002	−.200
		Newcomer	56.06		
	Start-up bonus	Family successor	42.49	.018	−.313
		Newcomer	59.02		
	Social insurance subsidy	Family successor	45.12	<.001	−.231
		Newcomer	56.54		
	Privileged access to land	Family successor	40.36	.003	−.371
		Newcomer	61.03		

funding schemes. The variable “privileged access to land” may present a conflict of interest, as land is a limited resource, and those with access may have a different perspective on this funding scheme. Hence, new support programs for newcomers should differentiate from previous ones and specifically address access land access for this group. Alternatively, innovative farming methods that are less reliant on land, such as hydroponics, could be a promising solution.

The higher preference for investment funding and startup bonuses aligns with the need for start-up capital to purchase production facilities, as noted by Helms et al. (2019). Additionally, newcomers may be more inclined to support social insurance subsidies due to concerns about insufficient income to cover major social insurance contributions in the early stages of establishing their business.

5. Conclusion

New entrants are pivotal in addressing major challenges in European agriculture, especially generational renewal and the transition to sustainable business practices. Additionally, they contribute both quantitatively and qualitatively to rural development. In the literature, the

term “new entrant farmer” refers to both family successors and newcomers. Identifying and addressing differences between these groups regarding their respective requirements and potential impact on agriculture and rural development can help create more effective, need-based support measures.

This study investigates whether the distinct contributions and needs of family successors and newcomers necessitate tailored support schemes in agricultural and rural development policies. A quantitative online survey conducted across several European countries provided the dataset for this analysis. A regression model was applied to determine the necessity of differentiating between the two groups, while chi-square and Mann–Whitney U tests were used to estimate differences in their requirements and contributions.

This exploratory study makes several key contributions. With regard to the definition of new entrants, the average new entrant farmer in this study is 34 years old and has been in his or her role as a new entrant farmer for 4 years. These entrants aim to innovate and revitalise agriculture. The regression model suggests that feeling “established” as a farmer depends not only on years of experience but also on the mode of entry to farming—whether as a family successor or newcomer. The results indicate that newcomers, on one hand, often introduce fresh ideas, innovations, and networks to agriculture and rural communities. Their initial reliance on minimalist production setups may foster innovative, resource-efficient, and sustainable solutions. Additionally, they enrich rural societies by combining agricultural perspectives with insights from their previous non-farming professions and by reintroducing local economic value chains through small-scale, personalised processing and marketing concepts. On the other hand, family successors ensure production continuity, preserve rural value chains, and maintain cultural and familial traditions. If they exit farming, rural areas risk losing not only agricultural production but also entire families, leading to negative social consequences.

Given their differing yet complementary contributions, both groups offer significant value to agriculture and rural development. However, their dependency on public support and the type of support they need might vary. More targeted support schemes could enhance effectiveness by considering their entry pathways. Newcomers might benefit from starter packages, including equipment and risk insurance, while family successors may need support to manage the required transformations on specific farms and make their farms more crisis-resilient.

Considering the diverse agricultural structures and economic contributions across EU member states, new entrant support should not only differentiate between entrant types but also account for geographical differences. Instead of expanding or discontinuing existing EU support programs, refining them to be more individualised, targeted, and regionally adaptive would be beneficial.

This explorative study is the first to provide a differentiated perspective on new entrants by clearly distinguishing between family successors and newcomers. While it reflects the heterogeneity of European agriculture to some extent, future research should aim for greater representativeness within specific countries and include variables related to farm structures and resource endowments.

CRedit authorship contribution statement

Simon Stork: Software, Investigation, Conceptualization, Project administration, Formal analysis, Visualization, Data curation, Writing – original draft, Methodology. **Wolf Lorleberg:** Supervision, Funding acquisition, Conceptualization. **Bernd Pölling:** Funding acquisition, Project administration, Writing – review & editing, Investigation. **Xiaohua Yu:** Software, Validation, Formal analysis, Methodology, Supervision. **Jan-Henning Feil:** Conceptualization, Supervision, Writing – review & editing, Validation, Methodology.

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Declaration of competing interest

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Appendix A. Supplementary data

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Data availability

Data will be made available on request.

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