Factors affecting farm succession: the case of Slovenia

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Abstract: Slovenia, like other developed countries, is characterized by the fact that the number of farm takeovers is decreasing and farms are not being transferred to successors in a timely manner. As an EU member state, Slovenia is entitled to financial incentives intended to halt or at least ameliorate this trend, but the situation is nonetheless not improving. This article proceeds from the hypothesis that economic factors are not the only ones that affect succession on Slovenian farms. The hypothesis was confirmed in a study limited to mountain farms. It was determined that, although economic factors have a significant effect on succession on Slovenian farms, at the same time other factors also affect this. Among these, the factors that stand out the most are those through which tradition or traditional thought and behavioral patterns are expressed, as well as the factors that express the standpoints, perceptions, and opinions of farm owners.

Key words: farm succession; farm takeover; timing of succession; Slovenia

Farms are most often under the family ownership (as family farms) and they are therefore the only part of society that must ensure its own social and professional reproduction. On family farms, the supervision over the farm management and ownership is transferred within the family between generations (Gasson and Errington 1993). Succession on a farm is therefore the basis for a farm's existence and development. According to Laband and Lantz (1983), the succession on family farms is five times more frequent than in other professions and it represents the best example of the intergenerational transfer of physical and human capital. During the socialization process, a potential successor on a farm receives a detailed insight into the work of the farm owner and the farming lifestyle, a direct experience, and an intergenerational transfer of knowledge, and at the same time he/she develops respect for all of this, especially for the land as a primary resource for making a living on the farm. Therefore, according to Laband and Lentz (1983), the transfer of human capital between generations in the same family also represents its enrichment, and at the same time, this increases the value of physical capital – both its actual value as well as the awareness of its value. In order for this to happen, basic conditions must be fulfilled; specifically, that the takeover of the farm and the continuation of farming actually take place, and that the transfer of the farm to the successor take place in a timely manner.

One of the major problems of agriculture in developed countries is a reduction in the number of farm takeovers or the transfer of farms to successors. The European Union is trying to stop these negative trends through certain measures. On the one hand, this involves support for young farmers to take over farms, carried out in the form of one-time, non-repayable financial assistance for an easier takeover and a structural adaptation of the farm after takeover; on the other hand, this involves the support for the early retirement of farmers, which is carried out in the form of annual annuities to elderly farmers that stop engaging in the profit-oriented agricultural and forestry activities on the farm as a result of transferring the farm to a successor.

As a member state of the European Union, Slovenia is entitled to funds under these measures. Promoting the takeover of farms and their timely transfer is especially important in Slovenia because the state of succession and the age structure of owners on Slovenian farms is very worrisome: according to the official statistics, only 23% of farms have a chosen successor, the average age of owners is over 56, and the share of owners over 55 is more than 55% and increasing. Nonetheless, the EU measures, which are primarily based on financial incentives, are too small to keep young people farming in Slovenia and to ensure the timely transfer of farms. Farm succession is very complex and it is therefore hypothesized that economic factors are not the only factors that affect farm succession.

Based on a study carried out on Slovenian farms, this article seeks to confirm this hypothesis. It seeks to address three issues regarding which factors affect the following and how:

– Whether a person has already or will be designated or anticipated as the successor on a farm that will entirely take over the supervision of managing the farm after the owner and which will also become the

head and owner of the farm, or whether somebody has at least already been designated or anticipated for this role;
– Whether this person decided on his/her own to succeed the owner, and whether he/she has also decided to continue farming after taking over the farm;
– When the owner intends to transfer the farm to the designated or anticipated successor, or how old he/she will be at that time.

The first issue applies to designating a successor on a farm, the second to the successor's decision regarding taking over the farm, and the third to the timing of the farm transfer to the successor. This study defined designating a successor on a farm and his/her decision regarding taking it over as the state of succession on a farm. The state of succession on a farm and the timing of farm transfer were defined as the 'farm succession'. Because this involves planned (anticipated) takeovers and transfers of farms, an ex-ante research approach was used in this study.

MATERIAL AND METHODS

Selection and definition of factors to study

In identifying the factors believed to affect succession on Slovenian farms, this study focused on factors that are significant for each individual farm or that 'arise from them.' In comparison with factors such as the macroeconomic conditions, the conditions in the labor market, and so on, in this study one can speak about the 'internal' factors of a farm or the structural factors of a farm. The analysis included 48 of these and they refer to the location of a farm as well as to the demographic, ownership, production, technical, and developmental structure of a farm. The factors were selected based on an analysis of studies on the effect of the factors on farm succession. Below is an overview of these studies and the factors that they included.

Factors in studies from non-European countries

In a study of Israeli farms, Kimhi and Nachlieli (2001) determined how the characteristics of the farm family and the farm affect farm succession. Kimhi (1994) also paid attention to how the age and experience of the owner, the successor's level of education, socioeconomic characteristics, and characteristics of the farm affect when the owner transfers the farm to his/her successor. Kimhi and Bollman (1999) examined a 10-year period to determine why the owners of Israeli and Canadian farms decided to stop farming as well as the aspects of the owners' behavior connected with this decision. For each farm, they studied factors connected with its location, the personal characteristics of the owner, off-farm employment of the owner, the type of farm production, the size of the farm, and other characteristics of the farm. Kimhi and Lopez (1999) conducted a study of farms in Maryland in which they examined how the characteristics of the owner, farm family, and farm affect decisions on farm takeover. Prior to this, Gale (1993) examined the effect of the demographic and economic factors and farm location on the actual and potential farm takeover by younger successors, and Goetz and Debertin (2001) studied factors believed to affect the American farm exit, focusing on the effect of various characteristics of the farm and farm family as well as the effect of regional characteristics.

Factors in studies from the EU countries

Quite a few studies have been conducted in Europe regarding the factors that affect farm succession. In a study of Piedmont farms, Corsi (2004) investigated how the characteristics of the owner, farm, and location affect the likelihood that the farm will have a successor within the family. Succession on Irish farms was the subject of two separate studies by Hennessey, who was primarily interested in the effect of the economic and demographic factors, as well as the factors of the farm on the career decisions of the potential successors (see Hennessey 2002, 2004). Pietola et al. (2003) studied Finnish farms over a 6-year period and determined how the agricultural market and policy, the short-term early-retirement programs, and the characteristics of the farm and owner affect the older owners' decisions on early retirement and how to operate the farm after this. Väre et al. (2005) examined farms in Finland and also determined the effect of the characteristics of the farm and farm family on the planned (anticipated) and actual succession. The greatest number of studies examining the effect of various factors on farm succession have been carried out in Germany and Austria. The first studies of this type were done in (West) Germany by Wilstacke (1987, 1990), Pfeffer (1989), and Fasterding (1989, 1995, 1999). Recently, much attention has been directed to the findings of Tietje, who published the findings of a study on the effect of the structure of the agricultural sector and off-farm factors (2003), and whose doctoral dissertation presents findings for North American farms, for which he studied the connection between the special

characteristics of the family and the farm as well as certain personal stances by the owners toward the succession process with the probability of succession in the specific period observed and up to the time the farm is transferred to a successor (2004). Tietje also published the results of this study in a paper coauthored with Glauben and Weiss (see Glauben et al. 2004), after the same authors published the findings of a study carried out in Western Germany, in which they examined the factors thought to affect the farm exit (see Glauben at al. 2003). They were interested in the effect of various characteristics of farms and farm families as well as the regional characteristics. Glauben, Tietje, and Weiss also examined the connection between the succession and various farm-based factors for farms in Upper Austria. They determined whether the succession and the time of farm transfer to a successor are connected with special characteristics of the family and farm (see Glauben et al. 2002). Weiss specially examined farm exit and farm survival in Upper Austria in two separate studies. The first study (Weiss 1999a) examined human capital, the off-farm employment, the characteristics of the owner and farm family, and other characteristics of the farm and how they affect its survival. The second study (Weiss 1999b) examined the characteristics of the owner and his/her family, the farm, and the off-farm employment of the owner and his partner and how these affect farm exit. A study of farms in Upper Austria by Stiglbauer and Weiss (2000) describes how the characteristics of the farm family and farm affect the actual succession on the farm and farm exit.

Study sample and methods

To ensure that the structure of the farms studied be as homogenous as possible for the comparative value of the findings, this study was limited to a specific segment of Slovenian farms: the mountain farms. According to Hribernik (1994a), the process of farm exit in Slovenia is especially characteristic of the mountainous areas. This is especially worrisome because mountain farms are the most important element of the mountain cultural landscape; they continually shape and maintain these landscapes (Natek 1989), and the landscape elements that impact changes in the landscape in various ways are concentrated in these farms' potential (Markeš 1998). To ensure that these mountain farms were as similar as possible, a target group of mountain farms was created. They were selected based on three criteria:

– They had to be in the alpine or prealpine area of Slovenia;
– They had to be mainly engaged in the livestock production;
– The owners had to be at least 45 years old.

The last criterion was selected because the issues regarding farm succession become more significant for the farm owners' plans when they approach 45 years of age. At that time the owner's anticipated successor, if this is one of his/her descendents, is old enough to take his/her own stance regarding the owner's plans and expectations regarding the farm succession and to make a decision. Potter and Lobley (1992) determined that young owners mostly expect their farms to be taken over in the future regardless of whether they have a real basis for this. Potter and Lobley (1996a) also state that the majority of owners under 45 believe that it is too early to discuss the farm succession and plans connected with this. As determined by Weiss (1999b), Kimhi and Bollman (1999), and Juvančič (2002, 2006), the probability of farm exit even decreases as the owner's age approaches 43, 44, or 45, but it continually increases after this. Weiss (1999b) connects this with the 'life cycle effect.' These findings confirm the correctness of the decision to include only owners 45 and older in the sample.

Because the Slovenian statistical services do not offer all of the data that were needed for this study, these were obtained through questionnaires. The inquiry was carried out in summer 2009. The final study sample for investigating the effect of the selected factors included 789 mountain farms or 11.6% of all mountain farms, which were defined as the target group based on the criteria. The fact that the research sample is representative despite this low share is clear from the comparison of the data on certain basic characteristics of the sample with the data that apply to all mountain farms in the target group (this involves data obtained through the farm censuses). In average the owners of the sample mountain farms were 60.9 years old, whereas all owners in the target group averaged 60.4 years old. In both cases, males accounted for three-quarters of the owners and the differences in the average farm size were also very small: the farms in the research sample averaged 21.7 ha, and all farms in the target group averaged 20.6 ha. The findings of the study have therefore been generalized to all mountain farms in Slovenia that fit the target group criteria.

The effects of factors were determined using special regression models called the 'discrete choice models.' Fox (1997) states that it is characteristic of regression models that they can be used to predict the value of a dependent variable from the values of the explanatory variables based on the model adopted and the evaluation of its parameters, whereas the discrete choice

models (as probability models) make it possible to predict the likelihood of a choice or the probability that an event will occur (Liao 1994, Wooldridge 2002). In this study, this involves events that apply to the state of the farm succession and to the anticipated time of the farm transfer to a successor. Following the empirical analysis, interviews were used to obtain the owners' opinions and considerations, and these were compared with and connected with the findings of the empirical analysis. In addition to the agreement with the findings of the empirical analysis, the interviews also revealed connections between the causes for the state of the farm succession and the anticipated time of the farm transfer to a successor, which had remained vague when studied with quantitative methods. It was also determined which feelings and behaviors of the owners are connected with the succession on mountain farms.

RESULTS AND DISCUSSION

Results have shown that among 48 studied factors, 13 of them have a significant effect on the farm succession. Among these, three factors express the economic strength of a farm:

– farm size
– marketability of livestock production
– amount of annual income from farm sources

The other 10 factors that have a significant effect on farm succession can be divided into two groups:

(1) Factors that reflect the tradition or traditional thought patterns and behaviors:
   – number of male children in the owner's family
   – owner's age at farm transfer
(2) Factors that reflect the owner's stance, perceptions, and opinions:
   – owner's opinion of the farm's remoteness
   – owner's opinion on whether he/she would take over the farm and run it if he/she had the opportunity to decide again
   – owner's opinion on changes in the volume of work on the farm in the future
   – owner's opinion on changes in the farm size in the future
   – owner's opinion of the viability of the forest potential
   – owner's opinion on whether the future farm income will increase most from farm sources
   – owner's opinion of the farm's financial capacity for investment in further development
   – owner's opinion of the farm's encumbrance for further development due to loans and other financial encumbrances.

Effect of factors reflecting a farm's economic strength

The fact that factors reflecting the economic power of a farm and its developmental orientation clearly affect succession is confirmed by the findings by Barbič (1993: 265), who determined that "young people that continue farming do so increasingly less for emotional reasons and increasingly more for economic reasons." According to Kovačič (1995), the ever more demanding conditions of running a farm require a constant introduction of innovations and the adaptation of the production structure to market demands. In such an environment, only farms with a sufficient economic strength can achieve the ongoing development.

One of the most important factors reflecting the economic strength of a farm is its size. According to Hennessey (2004), *farm size* is a more important factor for determining the effects on the state of farm succession than is the farm income. Specifically, the level of the annual income reflects the current and not the future economic capacity of a farm. The importance of the farm size is also shown by the fact that the majority of researchers included this in their analyses (e.g. Kimhi and Lopez 1999, Stiglbauer and Weiss 2000, Kimhi and Nachlieli 2001, etc.). Glauben et al. (2004) determined that on large German farms, the designated or anticipated successors wish to take them over as soon as possible so that they can use their knowledge and ideas to enrich the farm's capital and to improve their own standard of living. In Germany in the 1990s, the farm size was therefore even the main factor in deciding whether to abandon farming (Glauben et al. 2003). These findings agree with those of Fennell (1981) and Gasson et al. (1988), who found that one of the main reasons the owners' children do not take over farms is because they are too small.

> *A farm with a few hectares of land cannot ensure a proper income for the working and dependent members of a farming household (especially if such a farm is in an area where farming is difficult), and it cannot provide a level of social security that will motivate young people to preserve farms as the units of production and property (Hribernik 1996: 16).*

If farms are too small, then the potential successors, other members of the owner's family, and members of other potential families on the farm seek an off-farm employment because "only farms that will generate sufficient income should survive, which means looking for income opportunities on significantly larger bases" (Hribernik 1996: 28). Gasson (1986) found that the off-farm employment, which usually contributes the most to the share of income from the off-farm

sources, can lead to a greater stability and raising the total income and economic strength of a farm, and with this the profitability and continuation of farming, and at the same time this can represent a first step in giving up and abandoning farming, especially if these sources begin to dominate in the total annual income on the farm.

Empirical analyses by the previous researchers have not included the *marketability of livestock production* as a factor that (as anticipated) affects the state of the farm succession. In market production, farmers must adapt their agricultural production to market demands and produce quality products for which there is a demand. According to Vrišer (1995), under such circumstances dynamic young people cope best, and so it was concluded that the marketability of production has a motivating effect on the potential successors to make a decision to take over farms, and to continue farming. The significance of this factor also lies in the fact that as a rule, it is not determined by the farm size (e.g. smaller farms can also have a completely market-oriented production). The findings of the empirical analysis show that over 81% of farms that produce livestock completely for the market have a designated or anticipated successor that has already decided to take over the farm and to continue farming, or the owners of these farms believe that they will surely find and designate such a successor. Nearly three-quarters of farms on which there will be no succession or further farming has a subsistence orientation and the share of their production destined for the market is below 50%; of these, nearly one half have already designated or anticipated a successor, but the potential successor has not himself/herself decided whether to take over the farm and the owner also believes he/she will not do so, and on almost one-third of these farms the designated or anticipated successor will not continue farming after taking over the farm. This means that the older owners in particular, despite the low marketability of livestock production, will continue in farming and they expect their successors to do so as well. On the farms studied, nearly 60% of the owners over the age of 65 have already designated or anticipated their successor, although these successors will not decide to take over the farm or will not continue in farming. Kerbler (2003) described this phenomenon in connection with the owners of farms that were categorized as non-vital regarding the succession under the author's typology; he determined that, despite the low level of marketing and the planned low intensity of livestock production, the owners were renting the uncultivated farmland near their farms – not for economic reasons, but for aesthetic reasons (maintaining the appearance of a cultural landscape) and emotional reasons (respect for their work, the work of the previous generations, and the traditional values).

An elderly owner of one farm added a note at the end of her questionnaire: "On our farm, we cultivate these slopes and gullies out of respect for our parents." Nonetheless, due to the small size of her farm, this owner was uncertain about whether it would continue to be farmed because she wrote:

> *Although I hope that my son will keep working it, I'm not completely convinced he will. If this kind of policy continues, these small farms in these hills will be completely overgrown. It's a pity for our pretty country ...*

The effect of factors reflecting the tradition or traditional thought and behavioral patterns

The number of male children in the owner's family is a factor that clearly reflects tradition. Specifically, according to the tradition, an owner's sons have the precedence over the daughters in taking over a farm (Kimhi and Nachlieli 2001). This is also evident from the ratio between the number of male and female owners on the farms studied – the majority (75%) of owners are male – and the ratio between the male and female designated and anticipated successors, in which the males represent 80%.

> *Although the significance of traditions and traditionalism (especially patriarchalism and conservatism) has also decreased greatly in many respects in the countryside and among the rural population, it cannot be overlooked that the behavioral patterns in the intergenerational transfer of farming have been preserved relatively well. Farms are still overwhelmingly being taken over by men, and much more rarely by women, and moreover, only if there is no other option (Hribernik 1994b: 41).*

According to the data from the empirical analysis, the probability that a successor will take over a farm and continue farming is nearly 70% if all of the owner's children are sons. If the owner has only daughters, the probability is 55.2%. A more detailed analysis of the data from the study shows that the owners usually select a daughter to take over the farm because they have no male descendents; in almost 65% of the farms studied on which an owner's daughter was selected as the successor, there were no male descendents. At the same time, daughters are usually only anticipated to take over the farm, and not designated with certainty; this was the case in the study for 84.6% of the female successors selected. Considering that nearly all of the anticipated female successors on the farms studied are under 40 years (the majority are no older than 30), it can be concluded that some owners are still hoping

that they may be able to select a male successor from one of their grandsons or that a son-in-law can be designated for this role. In this regard, Tietje (2004) has determined that the owners prefer to designate their sons-in-law as successors rather than their daughters. It is interesting that designating a son as a successor seems completely obvious for most. This can also be understood from the thoughts of one of the owners that participated in this study:

> *... I have one daughter and only one son, who has just finished high school. He likes to work on the farm, and if I don't give the farm to him soon, he might lose interest and go. Then I won't have anyone else I could give the farm to. There are a lot of cases like this in our hills ...*

According to Stiglbauer and Weiss (2000), societal notions and expectations perceive the main obligation of women (wives and/or mothers) to be caring for the home, which would hinder them in possibly taking care of business matters. Considering the findings of the empirical analysis, it can be concluded that this is especially the case on farms, especially on mountain farms, where the families and the relations in them are much more traditional than elsewhere in the countryside. This is also supported by the findings by Černič Istenič (2003), which indicate that Slovenian farms are still very much rooted in the patriarchal ideology, although the farm women that participated in the study did not characterize such relations in their families as problematic. "Farm women are emotionally tied to their families and they are also committed to them because of this" (Černič Istenič 2003: 61). However, the results of her study also show that the farm women often compensate for their (unexpressed, suppressed, unrecognized) subordination by not encouraging their daughters to work and live on the farm. According to Hribernik (1996), the fact that young women consciously reject farm life as an unattractive living option is also reflected in the clear limitations in the marriage market. As a rule, only young people that grew up on a farm and are familiar with the pros and cons of the farm life marry onto a farm (Barbič 1993). This is reflected in the large number of single men on Slovenian farms: "Many young men remain on farms as the successors, without real opportunities to create a family life and to ensure a timely generational continuity" (Černič Istenič 2003: 32).

Although the tradition is therefore still an exceptionally strong factor in maintaining farming among the young generation – according to Hribernik (1993), the commitment to tradition, which is greater for the farming population than for other spheres of the population, means that there should be less abandonment of farming than expected given the marginal position of the farming profession in Slovenian society – caution must nonetheless be exercised in interpreting factors such as the 'traditional' privileging of male heirs. Traditional patterns can also endanger the existence of farms because they impede the succession process and the timely farm transfer to successors. This is also confirmed by the findings of the empirical analysis; there is a marked influence of the number of male children in a farmer's family on the timing of succession, but it is a negative one, which is also seen in the findings of studies by Kimhi (1994) and by Kimhi and Nachlieli (2001). According to Kimhi (1994), the reason for this is probably the greater number of potential successors, due to which the owner usually takes more time to decide on a successor. Due to the waiting for a male successor and with this the owners' delay in defining successors and transferring farms, it may happen that the succession simply does not take place on these farms. Farm owners should therefore overcome the traditional patterns of privileging male successors, and they should come to the realization that women can also be good and capable farm owners.

The second 'traditional' factor that may also represent a threat to the existence of farms and that has a great influence on the timing of the farm transfer is the *age of the owner at the farm transfer.* Slovenian farms still have very deeply rooted traditional patterns regarding the timing of the farm transfer. It turned out that very often the owners 'traditionally' (formally) retain their farms in their own hands until their deaths, or that they transfer them only when their strength is giving out or they become ill and are no longer capable of running the farm. These findings agree with those of Kimhi and Lopez (1999), who believe that, despite the negative consequences, farm owners turn their attention to the question of a successor only when they are elderly, and in many cases they drag this out until their deaths. There appear to be two reasons for this. First, the owners have a great emotional attachment to their farms. For many Slovenian farm owners, their farms are still a way of life and a reason to live, a lifelong project, and not just capital that must continually be enriched (Kerbler 2003). The second reason for delaying the farm transfer is the owners' fear. According to Pinterič et al. (2006), being in charge of a farm gives the owner power, rights, and prestige, and thereby the obedience of his/her family and those working on the farm. Farm owners fear that they will lose their rights and prestige by transferring the farm, and with this their sense of purpose. In order to strengthen the positive meaning of succession, it is therefore necessary to recognize and move beyond the traditional patterns on Slovenian mountain farms that hinder the succession process and thereby threaten the further development

and existence of mountain farms. Especially among owners, there should be awareness that farms must be transferred to their successors in a timely fashion, that they can have confidence in their children, and that they also need not fear transferring to them what they created with a great effort.

The empirical analysis showed that the farm handover is primarily delayed by the owners of large farms, which is unique by the world standards. All other studies that examined how factors affect the farm transfer showed exactly the opposite. This is an additional confirmation that on Slovenian farms the factors through which tradition is reflected have a greater influence on succession than economic factors. The size of a farm and the investment in it does motivate the potential successors to decide to take over a farm and to continue farming, but it is clear that the farm owners often delay the handover after their successors have begun directing their energy toward working on the farm. It can be concluded that the owners of large farms are closely connected to the work and life on the farm, and that their emotional attachment to the farm is also closer. When an owner finally decides to transfer, or when the transfer has to occur because the owner has died, it is often too late because the one that was designated as the successor, and that had once himself/herself also decided to take over the farm and to continue working it, has already lost hope and his/her inner drive because of waiting, and has also himself/herself aged during this time and sought other work in the non-farming sector. He/she has created his/her own home, his/her own family, and new plans for his/her life. During this time, the farm has also lost capital and its financial strength has been reduced because older owners often are not innovative enough and inclined toward market innovations, and they invest too little into the farm development. At some point, all of this additionally contributes to discouraging a previously certain successor from taking over the farm because he/she would have had to invest an enormous amount without any guarantee that his/her idea would be realized and that he/she would see a return on his/her effort. This also applies to any of the owner's other children that would be the potential successors. According to Hribernik (1995: 210), 'the idea that a "driven away" descendant would return to the farm after having already set up his/her own life elsewhere is hardly likely.'

In connection with the age of the farm owner and the timing of the farm transfer, Glauben et al. (2002) spoke about the phenomenon of a 'time path for farm transfers.' In their opinion, an extended planning time for the farm handover also lengthens the actual time of transfer because the owners that plan to hand over a farm to a successor in 5 years tend to actually do so, but those that plan to transfer the farm in more than 5 years actually do so later than they have planned. This shows that the older an owner becomes, the more difficult it is to transfer a farm to a successor. A more detailed analysis also revealed that there are differences between younger and older owners with regard to the transfer of farms to successors, which is shown in their relationship to the farms and farming or in their understanding of the positive and negative consequences offered by the traditional thinking and behavioral patterns. It has turned out that younger owners are more familiar with the principles of market economics, especially the mechanisms for more effectively accumulating capital, than are the older owners, and therefore they transfer farms to their successors earlier than the older owners. According to Kimhi (1994), this commonly takes place before the productivity of the farms starts to fall or shortly thereafter (the author describes such owners as altruists). These findings are also confirmed by the case of a Slovenian mountain farm studied, on which the successor has already been precisely defined and will continue farming. The owner is 52 years old and plans to hand over the farm to his successor in 4 years, when he turns 24. With regard to timing the transfer, the owner emphasized the importance of the owner's age at which transfer to a successor takes place:

> *... I raised my son, who will follow me, to be an honest and good man. He helps me a lot, already makes decisions about many things, and as soon as he's done with the agronomy program at the college, I'll turn the farm over to him. Even though I'm still young, people like us are already old to our children. They say young people make the world go round. ... Not like on a lot of Slovenian farms, where the owners hang onto the farms until they die, and by that time the young people have already given up hope ...*

The more detailed analysis also showed that the farms on which the owners are between 50 and 55 years old represent the greatest share of farms on which the designated or anticipated successors have also already made a firm decision to take over the farm and to continue farming. According to Pfeffer (1989), during this time the farm family is in the 'stage of the life cycle' called the 'stage of generational transition.' Owners should make use of this favorable time and transfer their farms to their successors even if they feel that they are still filled with vital energy, enthusiasm, plans, and ideas. As the age of owners increases, there is also an increase in the number of farms on which the succession will not take place or which will no longer be farmed after they are taken over. The share of such farms exceeds the share of

those that will be taken over and farmed further when the owners are 60 to 64 years old; that is, at the end of their active working lives.

The effect of the factors reflecting the opinions, perceptions, and attitudes of owners

Because educating a potential successor as a future owner takes place entirely on the farm within the family, a very important role in the intergenerational continuity on farms is played by the parental orientation. In a traditional and largely still patriarchal society such as that on farms, this applies to the owners' orientation or their points of view, perceptions, and thinking. The behavior and thought patterns that the potential successors receive during the socialization process from the owner (who is a model for the potential successor in his/her future profession) are very well preserved in the intergenerational transfer of farming. In the intergenerational transfer of farming, there is a good preservation of the behavior and thought patterns that the potential successors receive during their socialization process from the farm owner, who serves as a pattern for the potential successors in their future profession. Tietje (2004) states that the parents' orientation is often transferred to their children. It can be concluded that in Slovenia, this especially applies to farms in the mountainous areas; in comparison to the farms in valleys and flatlands, these farms have had several centuries of specific development, primarily based on the economically self-sufficient nature of these farms and the closed nature of farming society. According to Hribernik (1993: 254), "the same social system reproduces itself especially if the traditional farming society has a poor internal social differentiation and if the patina of the past predominates over the present and future, constantly reproducing itself in the socialization process, and farming culture is directly passed on from generation to generation."

The findings of the empirical analysis showed that the perceptions and opinions of farm owners regarding the structure of farms have a greater influence on the decisions of potential successors regarding taking over the farm and continuing to farm than does the actual structure of the farm. According to Treven (1998), perception is a psychological process in which the individuals interpret information from the environment and, on this basis, shape their own image of the world. Perceptions substantially differ from the objective reality and have a strong influence on the people's behavior, and therefore the behavior is not based on reality itself, but on the perception of what the reality truly is. It turned out that, if the owner perceives work on the farm and the farming way of life as generally being a burden, and if he/she is worried about the further development of the farm or has no confidence in the farm as a primary source of livelihood, the likelihood of the farm being taken over and further farming on it is significantly lower than if the owner has a supportive, positive attitude. Through the positive perception, support, satisfaction, and happiness with work and life on the farm, and a good opinion of the farm, its structure (especially economic structure), and its current and future development, the owners can therefore have an important influence on their potential successors' decisions to take over the farm and to continue farming, thus preserving the intergenerational continuity and thereby enabling the further development and existence of the farm.

Among the factors that reflect the owners' perceptions and opinions, the factor with the clearest influence is the one referred to as the *owner's opinion on whether he/she would take over the farm and run it if he/she had the opportunity to decide again.* According to Fasterding (1995, 1999) and Tietje (2004), an owner's opinion that he/she would take over the farm and run it if he/she had the opportunity to decide again reflects his/her satisfaction with his/her profession. It also reflects his/her happiness with working and living on the farm, his/her respectful relationship to farming, and the preservation of the previous generations' heritage. All of this has a very important motivational effect on the designated or anticipated successor's preparations and decisions to take over the farm, which is also confirmed by the findings of the empirical analysis. The farms whose owners would take over the farm and run it if they had the opportunity to decide again include 77.8% of those that will be taken over by a successor that will continue farming on it, and the farms whose owners would not decide to do this include 66.8% of those that will not be taken over or will be taken over by a successor that will not continue farming. Another interesting finding is that, among the farms where a successor has not yet been precisely defined and nobody is yet anticipated to assume this role, and the owners would not have decided again to take over the farm, nearly 84% will not seek a successor to the owner, due to which the intergenerational continuity will not be preserved.

The significance of satisfaction with farm work is also reflected in the opinion or thoughts of a young owner of a mountain farm. Having taken over the farm, he will continue working it. He is 24 years old and has a secondary school education in agriculture; in the future, he is planning to increase the number of livestock and he plans to outfit the farm with new

equipment and machinery. The previous owner, his father, would decide to take the farm over again and work it without hesitation, if he had the opportunity. During the interview, the young farmer stated:

> *... I've been happy to keep working hard on this farm for several years. That's why I decided when I was still young to keep on farming. We work everything, even the steepest slopes. If conditions don't get too bad for farmers, I'll be happy to keep going. I don't like it if they check up on the farmers too much, and I don't plan to become a slave ...*

In contrast, another example shows how an owner's dissatisfaction with his profession can also have the opposite effect:

> *... I don't want any of my children or grandchildren to live such a hard and meager life. Being happy with nature and your animals alone can't outweigh the sacrifices and hard work you face by living on a mountain farm like this ...*

On this farm, a successor had not been defined yet and nobody was anticipated to be a successor; the owner was also not looking for a successor and will also not find and designate one until he stops farming. If the owner had the opportunity, he would not decide again to take over the farm and work it.

The results of the empirical analysis showed that the location of a farm has a significant influence on the state of succession on the farm; however, more important than the physical, actual (temporal/spatial) distance of the farm (e.g. from a municipal center, elementary school, grocery store, doctor, veterinarian, or the nearest main road in the valley) is *how the owner understands this remoteness.* If the owners believe that they are remote and distant from the nearest administrative centers and the main road in the valley, the likelihood that the farm will be taken over by a successor that will continue working it is lower; in fact, 40 percentage points less than on the farms whose owners have the opposite view regarding their location. On 60.3% of farms whose owners believe they are remote, isolated, and distant from the nearest administrative centers and main road in the valley, there will be no takeover or those that take them over will not continue farming. Conversely, 79.6% of farms whose owners do not consider them remote or isolate will be taken over and continue to be worked.

After the Second World War, as people acquired cars and road infrastructure was improved in the mountainous regions in Slovenia, the actual temporal/spatial remoteness of farms gradually decreased. However, if an owner (nonetheless) perceives his/her farm as remote, the reduction in the physical distance does not have a significant effect on farms being taken over more frequently. This is also shown by a more detailed analysis of the survey data. Farms were examined that were 5 to 15 kilometers far from the municipal center, which is true of two-thirds of the farms studied. Just under one half of the owners perceived these as remote, and the other half did not. It turned out that in the majority of cases, it was exactly their opinion that also defined the state of succession on farms because the average remoteness of the farms in both groups was the same. Only 41% of farms whose owners consider them remote will experience the takeover and further farming, as opposed to 82.2% of farms whose owners do not consider them remote. Based on these findings, this adds to Hribernik's (1996) determination that farms that are distant from the major traffic and social communication links have a very small probability that the descendants that moved away will return to the farm. It is likely that the probability of the takeover would be greater if the owners believed their farms were not distant or isolated.

Natek (1992) determined that, in addition to animal husbandry, forestry is the most important economic activity for the continued development of Slovenian mountain farms. In his opinion, "many mountain farms would never have been able to advance so far if they had not also owned forests with rich wood reserves" (Natek 1983: 251). This is also confirmed by Čampa (1992), who believes that, since the beginnings of its commercialization (since the nineteenth century), wood on Slovenian mountain farms has been a well-invested capital or a reserve for economic crises, failures, and farming accidents, and also for paying inheritances and debts. During a general crisis or a farming crisis, the revenues from wood sales can also replace the revenue deficit from the agricultural (livestock) production. Based on this, it was anticipated that forestry has a positive impact on the state of succession on a farm.

Nonetheless, as determined by Robič et al. (1988), forests on Slovenian mountain farms have already been extensively cut due to the large financial needs. "In the recent past, the revenues from forestry funded the construction of the road network, which was the basis for intensified farming, and indirectly these revenues supported the farms' reorientation and modernization" (Robič et al. 1988: 18). It therefore seems that the vitality of the forestry potential is a more important indicator for the decision to take over a mountain farm than the size of the wooded area or the annual cut. The vitality of the forestry potential is a qualitative factor, and therefore it involves an estimation or opinion of whether the forest on a farm has already been extensively cut or not. A farm can also have a high annual cut even if the forest has already been extensively cut; however, when this reaches the upper (permitted) limit of deforestation,

cutting can fall sharply. A forest is a renewable natural resource, but this renewal is long-term and therefore the frequent and unanticipated economic changes can also threaten the existence of mountain farms. The factor *vitality of forestry potential* was designed for this study and as such it was first used in the study of factors affecting the farm succession.

The results of the empirical analysis confirmed this hypothesis. On farms whose owners believe the forest is already extensively cut, the probability that they will be taken over by a successor that will continue to work them is 38.4 percentage points less than on the farms whose owners are convinced that the farm's forestry potential is still vital. More than two-thirds of farms without a vital forestry potential have no assured intergenerational continuity, whereas this is certain for nearly three-quarters of farms with the vital forestry potential. A more detailed analysis showed that most of the farms studied with extensively cut forests are those on which the owners have already designated or anticipated successors, but these successors have not themselves decided whether to take over the farms, and the owners are also pessimistic in this regard and of the opinion that it surely will not happen. Another interesting finding is that nearly 82% of the farms on which a successor has not yet been designated or anticipated have a vital forestry potential, but their owners are optimistic and believe that their farms will certainly preserve the continuity of succession and that the successors will also continue farming after taking over the farm.

The factor reflecting the *owner's opinion about the farm's capacity for investment in further development* and the factor reflecting his/her *opinion about the encumbrance for further development* due to loans and other financial encumbrances are very important in the potential successors' decision on whether to take over the farm. The findings regarding the influence of the first factor are in line with the results of studies by Glauben et al. (2004), and regarding the influence of the second factor with the findings of Glauben et al. (2002), Väre and Weiss (2003), and Väre et al. (2005). If the owner believes that the farm is financially capable of investing in further development, the likelihood that there will be a successor that continues farming is by 38.6 percentage points greater than if the owner believes the farm is not financially able. The likelihood of preserving the intergenerational continuity is also lower if the owner believes that the debts due to loans and other financial encumbrances are too great a burden for the farm's further development.

Particularly important is the finding that the farms whose owners believe they have sufficient capital power for further development include nearly three-quarters of those for whom a successor has not only been defined, but has also himself/herself already decided to take over the farm and continue farming. On the other had, 45% of farms whose owners believe that the financial encumbrance threatens the further development of the farm still do not have a defined or anticipated successor, and the owners also do not see any possibility of acquiring a successor. Twenty percent of the owners of farms with financial encumbrances have defined or anticipated their successors, but these successors have decided that they will not take over the farms or that they will not continue farming after taking them over.

Therefore, if an owner is uncertain regarding the economic strength of the farm and, consequently, its future development, if he/she fears for the future development of the farm due to its financial encumbrances, his/her doubt is an important information for a potential successor when deciding on a profession. If children receive the information from their parents that the farm is financially incapable of investing in its future development, then, as shown by the findings of the empirical analysis, they ordinarily do not decide to take over such farms.

The owner's opinion of changes in the volume of work performed on a farm and its size in the future, and of increasing income from farm sources in the future – the influence of these factors must be interpreted with caution. The anticipated change in the volume of work performed on the farm, and the size and increase in the income from farm sources can be a cause of the state of succession on a farm and also a consequence of this. Potter and Lobley (1992), for example, interpret the use of farmland as a consequence of the state of succession on farms, not as a cause of it. In their opinion, the state of succession on a farm has a significant long-term influence on the farm's developmental direction and on the behavior and decisions of the owners (Potter and Lobley 1996b). In articles from 1992 and 1996 (see Potter and Lobley 1992, 1996a, 1996b), the authors discuss the action of three factors:

(1) The succession effect.
(2) The successor effect.
(3) The retirement effect.

The first two factors are involved if a successor is defined or anticipated on a farm, and the third factor if a successor is not yet defined and if none is anticipated.

(1) The *succession effect* should be seen in that the expectation of the takeover motivates owners to systematically invest in the farm's development. The succession effect is greatest on the farms on

which the succession is carefully planned and ordinarily begins with the birth of the owner's first child, strengthening when the successor himself/herself decides that he/she will take over the farm.

(2) When a designated or anticipated successor has already taken over part of the management on the farm, it is possible to speak about the *successor effect* or the *new blood effect*. For young successors, it is characteristic that they are very innovative at the beginning of their professional careers, and so according to Blanc and Perrier-Cornet (1993) they are the driving force in modernizing agricultural structures.

(3) The *retirement effect* is connected with the owner's retirement. On farms without successors, most often the retirement is followed by a gradual reduction of working hours, a reduction in the area of the farmland being used and the volume of agricultural production, and there is an increasingly less maintenance of equipment and machinery as well as structures, which are often empty. Weiss (1999b) and Stiglbauer and Weiss (2000) state that this phenomenon is characteristic of the 'doomed firms,' for which this manner of operation shows an awareness of the impending end.

Although Potter and Lobley (1992) also showed statistically that the owner's retirement as well as the expectation of a takeover and the presence of a successor on the farm have an effect on its structure, they emphasized several times in their study that the distinction between cause and effect is not clear. Stiglbauer and Weiss (2000), Kimhi and Nachlieli (2001), and Glauben et al. (2004) encountered similar problems regarding cause and effect relationships. To help understand the causes and effects, the authors recommended a broader timeframe of observation, and they believed that the research should focus on recognizing each farm's lifecycle separately. Because such a study would have completely different goals, this would also demand other research methods and techniques and, if there were an attempt to confirm whether it was justified to define each factor studied as a cause for the state of succession on a farm, this would far exceed the scope of the study. This study therefore followed the majority of studies examining the probability of succession and it defined the state of succession on farms as a consequence of the influence of various factors; in this case, the owners' opinions on changes in the amount of work performed on the farm, its size, and the sources of income on the farm in the future.

Regardless of which explanatory variable was included in the empirical analysis in this study (opinion regarding the amount of work performed, farm size, or opinion regarding income from farm resources), it turned out that its anticipated reduction had a clearly negative effect on the state of succession on mountain farms, whereas their increase had a clearly positive effect. The probability of the farm takeover decreased the most if the owners believed that the size of the farm would decrease in the future (by 58.3% if the size was expressed in terms of the farmland in use and 62% if expressed in the number of livestock). Farms whose owners anticipated an increase in livestock production included only 12.6% of those where the takeover will not occur.

CONCLUSION AND RECOMMENDATIONS

This study showed that in Slovenia the economic factors have a significant effect on the farm succession, whereby the European Union measures to promote the farm takeover and the timely handover are justified. However, the factors that could strengthen the takeover and the timely transfer of Slovenian farms are not only economic ones, showing the hypothesis of this study to be correct. Financial assistance for young successors and for the owners' early retirement is only the 'last resort' among the possible incentives for increasing the number of takeovers and transfers of Slovenian farms. This assistance is important only when a successor is assured on a farm and also precisely defined, and when this successor has decided for certain to take over the farm and then to continue farming, or when the owner decides to transfer the farm to his/her successor in a timely manner. However, such decisions must first actually be made! In order to encourage this, crucial steps must be taken much earlier. A sustained farm succession planning must be undertaken in order to understand the functioning and effect of the specific factors; to avoid fears, taboos, and the obsolete traditional ways of thinking, which lead to numerous risks that can reduce the likelihood of succession; to enhance the mutual trust among the farm family members and the positive thinking by owners; and to ensure the (successful and smooth) intergenerational transfer of the family farm. A farm succession plan should incorporate the following:

– A description of the personal and business goals, as well as the family members' expectations;
– A retirement plan, and a training and development plan for the successor(s);
– A farm business action plan (e.g. the future direction, etc.);
– An operating plan (e.g. the roles and responsibilities);
– A plan for the transfer of management, control, and labor;

– A plan for the ownership transfer;
– A communication plan;
– A contingency plan;
– An implementation timetable.

Because the farm succession is not an event that happens at some particular point in time, but a process occurring over time, affected by various factors and circumstances, a sound succession planning should also be ongoing, commencing when the family members are learning farming practices and becoming involved in the family farm. Starting out as an informal process, it should be consciously discussed over an extended period of time. The family farm (and therefore the succession plan) involves the interaction within the strong bonds of the family of the people that make decisions affecting the farm. Good plans provide:
– Sufficient time to generate income for those leaving the business to retire;
– Sufficient time to develop the farm to support the incoming generation;
– Plans that can help see the farm continue as a viable business;
– Strong motivation for the younger generation to contribute thought and energy to the farm, with an eye to the future; and
– Incentives to explore and develop the non-farm alternatives for children that will pursue an alternative career off the farm.

Because each farm is unique and no single approach works for everyone, the factors that affect farm succession should be recognized and the farm succession plans should be made for each farm separately. Due to the complexity of this issue, the plans must be prepared and guided by professional advisers (i.e. facilitators; ideally, a facilitator should have the knowledge and skills in all three major components of the family farm: family, ownership, and business), who cooperate and coordinate the work with the farm family on the one hand, and with numerous various experts and services on the other; that is, experts in farm taxation, lawyers, credit advisers, (farm) business advisers, financial planners, insurance experts (social, pension, life, etc.), and other experts according to the needs of each farm. Together they are associated in the farm succession planning network. In some countries (e.g. Canada, Australia, and the United States), such networks of partnering organizations and professional advisors are developing in order to help the farms to implement appropriate tools for their intergenerational transfer. They help the families by preparing the farm succession plans and by continually updating these plans to address new situations, as well as by guiding the families in implementing these plans.

Slovenia should follow the example of these countries and establish the farm succession planning networks and specialized centers (with services) for coordinating these networks. This would reduce the exit of young people from farming and accelerate the farm transfer over time. It would also provide satisfaction for all generations in farm families and increase the quality of their lives and work, as well as the cohabitation of generations on family farms.

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