In good as well as in bad times – The effect of household stability on entrepreneurial activity among older individuals

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Abstract

The self-employed are often seen as unmarried, childless, workaholics; however, empirical studies show the contrary. Based on longitudinal data of the US Health and Retirement Study (HRS), it is examined whether the probability of being self-employed as well as the probability of an entrepreneurial exit among individuals aged 51-65 is influenced by the presence of a partner, and the underlying mechanisms of this possible influence. The main findings indeed reveal that the presence of a partner positively influences the probability of being self-employed. The positive presence of a partner through paid-employment or self-employment as opposed to unemployment, and very good health as opposed to poor health, increases the likelihood of being self-employed. It is also found that having a partner who works for pay, having a self-employed partner or having a depressed partner, decreases the probability of an entrepreneurial exit. The self-employed are an important class of workers, and these findings contribute to our understanding of the underlying mechanisms of being and remaining self-employed.

Keywords: Self-employment, partner, Third Age Entrepreneurs, paid-employment, health, entrepreneurial exit.

1.Introduction

Over the past two centuries, self-employment as a career choice has received growing attention among academics. In many developed countries, the proportion of self-employed is substantial, making them an important class of workers and giving them attention from the national governments (Le, 1999). Governments see self-employment as an important solution to multiple problems at the macro level and therefore often stimulate the emergence of small businesses. The positive effect of entrepreneurial activity poses the question of how entrepreneurship can be stimulated. Even though many individuals report that they would like to be self-employed, only a small proportion of them is or becomes self-employed (Blanchflower, 2000). This also poses the question about what the determinants are of being self-employed. One of those determinants of being self-employed is the presence of a partner. Many scientific studies acknowledge that the marital status of the individual is an important determinant of being self-employed (Cowling & Taylor, 2001; Rees & Shah, 1986; Taylor, 1996). It is found that being married positively influences the probability of self-employment. It is also found that overall, the incidence of self-employment is higher amongst married individuals. According to Wadhwa et al. (2009), the stereotype is that an entrepreneur is a childless, unmarried workaholic. However, in their study they find that 69.9 percent of the 549 respondents was married at the time that they became an entrepreneur. Brown, Farrell and Harris (2003) also find that the incidence of self-employment is higher amongst married individuals. Out of the total sample of US individuals, 10.28 percent was married and self-employed, and 9.44 percent was separated, widowed or divorced and self-employed. Rees and Shah (1986) argue that married man may be more prepared to take risks, and family support may make self-employment less demanding, compared to not having family support. Therefore they included the marital status as a control variable in their study. This reasoning is followed by many more academics, but the exact reason for why marital status is positively related with self-employment remains unclear. There exists only a small body of literature that is more specific about the role of the partner. The most specific finding is that steady family income through paid-employment from one spouse increases the self-employed workers' ability to continue with their business, and therefore reduces the probability of an entrepreneurial exit (Lin, Picot & Compton, 2000). However, little more is known about the influence of the partner, and how different partner characteristics influence the probability of being self-employed

as well as the probability of an entrepreneurial exit. This study will contribute to the existing literature by filling the gap of knowledge about the underlying mechanisms determining the positive relationship between having a partner and the probability of being self-employed, as well as looking at how the partner influences the probability of an entrepreneurial exit.

Besides the presence of a partner, another determinant of self-employment is the age of the individual. Blanchflower (2000) found that for the OECD countries, it is common that self-employment is more prevalent among older age groups than it is among younger age groups. It is thought that this group has characteristics that are favourable to self-employment. These characteristics consist of having more experience, more assets as well as a broader network (Curran & Blackburn, 2001). Kautonen (2008) stated that older entrepreneurship is an under-researched area characterized by a scarcity of data. He himself is one of the few that studied older entrepreneurship. By studying 839 Finnish small businesses, he found that the start-up rate among the individuals aged 50 or over was 16.0 percent, which leads to the conclusion that older entrepreneurship is not a marginal phenomenon. It was also found that of the older entrepreneurs, only 10% were driven to self-employment by necessity. The older individuals are pulled into entrepreneurship, more than they are pushed. The results of the study confirm that older entrepreneurship is a relevant phenomenon. This is even more emphasized by Kautonen, Down and South (2008), studying the social and economic role of older enterprises in the UK. They found a positive relationship between older enterprise support policies and the social and economic role of these enterprises, showing the positive contribution of older entrepreneurs. However, they emphasize that longitudinal research design is necessary to study the benefits in more detail. Besides the benefits for the economy and society, Parker & Rougier (2009) found that self-employment is also beneficial for the entrepreneur himself. They found that a greater proportion of older employees in the UK made a transition to self-employment than the other way around. However, this was only 3.6 percent of all the older employees over five years. Their result shows that at an older age, moving towards self-employment is more attractive than moving from self-employment to paid-employment. This can be explained by a study of Kautonen, Kibler and Minniti (2017), showing that for late-career individuals, starting a business is positively related to a change in quality of life, and negatively related with a change in income. Apparently, becoming self-employed at a later age increases the quality of life, making it a beneficial option for the entrepreneur. The empirical studies show that older entrepreneurship is relevant, occurring

frequently and is contributing positively to the economy and society. Although literature is not scarce, the exact determinants of older entrepreneurship remain unclear. The underlying motivations have not been studied extensively before. However, given current demographic trends like the ageing of the society, older entrepreneurship is highly important, calling for deeper insights into the determinants of older entrepreneurship. The promotion of older entrepreneurship can be an important solution for lengthening the working life of the older individuals by letting them be an entrepreneur or preventing an entrepreneurial exit, which in turn increases the abilities to finance the increasing health care costs and increasing costs of pensions (Kautonen, 2008). This way, the ageing individuals themselves are part of the solution, making the promotion of self-employment among older individuals a relevant policy instrument. However, not for all older individuals, entrepreneurship is a suitable career choice. Small (2012) warns that the option of going into business will not be a sound choice for all, due to personal characteristics. These characteristics for some indicate potential success, and for others they contradict potential success. Given that the partner characteristics can be an important determinant of the probability of being successfully self-employed, it is relevant to study the influence of the partner characteristics among the older potential entrepreneurs.

Considering both the relevance of the partner characteristics and entrepreneurship amongst older individuals, there are a few characteristics playing a more dominant role at an older age. At a younger age, the relationships between individuals might be volatile, and the presence of young children can significantly influence the demand of the family life, which in turn influences the ability of an individual to be entrepreneurial. At a younger age, life can be more expensive, and individuals are more likely to have less accumulated wealth. Under these circumstances, the individual might not be willing to take the risk of entrepreneurship in this period of his life. When partners become older, their lives might be more stable. Among the older individuals, it can be expected that partner characteristics change less compared to partner characteristics among the young. Also, income needs may become less demanding, since the accumulated wealth can expected to be higher, especially when there is a working partner present, or a partner that has worked in the past. This period in life enables to some extent the isolation of the effect of having a partner. Besides the more beneficial circumstances, there are also more demanding factors at an older age. One of the factors more dominantly and most likely negatively present at an older age is the health of both the partners. At an older age, health is expected to become worse. This might

limit the potential success of being self-employed. Also the partner can have poor health, requiring time and care from the healthy entrepreneurial individual and reducing the potential success of the business. Besides health issues, the individual is also working towards retirement, which might change the motivation to be self-employed. All these characteristics influence the potential success of older entrepreneurship, making the partner characteristics amongst older individuals an interesting subject of research.

In the present paper, it is empirically studied if and how the partner influences the probability of being self-employed as well as the probability of leaving self-employment amongst older individuals. Based on longitudinal data from the Health and Retirement Study (HRS), pooled logit models are constructed studying the effects of having a partner, as well as employment and health characteristics of the partner. Whilst studying the effect of having a partner and the characteristics, several mediators are tested on a possible mediating indirect effect. Additionally, interaction terms are added to the model to obtain deeper insights into the consistency of the models and to determine possible differences in the outcome. Besides the interaction terms, robustness checks are performed in order to test the overall consistency of the models. Finally, a conclusion about the mechanisms determining the dynamics of being self-employed and leaving self-employment is drawn and the results are discussed.

This paper contributes significantly to the existing literature by studying which partner characteristics determine the entry and exit dynamics of self-employment amongst older individuals and it is the first paper to focus on the role of the partner and extensively study this role. A gap in knowledge about the role of the partner with regard to self-employment existed, and it is partly filled by the present study. The results of the present study enable the confirmation or rejection of the reasoning of academics justifying their results about the marital status. Besides the contribution to the existing literature, the outcome of this study points the direction for policy support by showing how entrepreneurship amongst older individuals can be stimulated. Especially, the outcome of this study shows for which older individuals it is most effective to stimulate entrepreneurship as well as how entrepreneurial exit potentially could be prevented. For example, when policy makers aim at lengthening the work life of older individuals and preventing them from early retirement, this study gives insights into what is important for an individual to continue with his business. This might be the good health of the partner, which underlines the importance

of good health care for older individuals, also to enable them to be entrepreneurial. It might also be to stimulate employers to offer more flexibility such that the older individuals could continue to work. More effective stimulation results in effective stimulation of entrepreneurship amongst older individuals, which could be an important solution to the problems that currently arise due to the ageing population.

In the remainder of this paper, a literature review will be presented in section 2. Based on the existing literature, hypotheses are presented about the relationship between several determinants of household stability and the probability of being an entrepreneur. In section 3, the data and methods will be discussed. Section 4 contains the results of this study. In section 5, interaction terms are added to the model in order to test the consistency of the model. Section 6 contains robustness checks with additional models. In section 7, the results as well as limitations are discussed. Finally, section 8 provides an overview of the conclusions that can be drawn based on this study.

2. Literature Background

2.1 Being an Entrepreneur

In this section, the determinants of being an entrepreneur will be discussed and a literature review will be given on what is known about the characteristics of the partner and the probability of being an entrepreneur, at an older age.

2.1.1 The Presence of a Partner

Contrary to the view that the self-employed are unmarried, childless workaholics, the self-employed appear to be married at the time they become entrepreneur (Wadhwa et al., 2009). Le (1999) argues that marriage is in economic literature assumed to represent stability. The individual has settled down and is likely to be able to rely on his or her spouse financially. Since the individual can rely on a stable home situation, he is able to be involved in risky self-employment. This effect can also be called the risk-pooling effect. Risk-pooling occurs when married people are attracted to self-employment because they are able to offset income risks with the income of other household members (Brown, Farrell & Sessions, 2006). The risk-pooling effect is also found by Schiller and Crewson (1997). They used a sample of 12,000 individuals between 14 and 23 years old. They found that when the husband has the primary employment, this increases the probability that the wife will be observed in self-employment. However, their result can also be explained by a traditional view on family life. Nonetheless, the risk-pooling effect is an important argument for why a positive relationship can be expected between having a partner and being entrepreneur. Besides the risk-pooling argument, there is another gain from being married. Being married and having a working spouse makes it easier for the couple to raise finances for the business. They can 'put up' more finance to start up a business by, among others, easier access to formal loans. Having wealth also makes it easier to raise finances, and it can be expected that a couple has more wealth due to a double income or the accumulation of assets and money (Bernhardt, 1994; Le, 1999). Also, couples have a larger social network giving them opportunities for more informal loans and financial support.

Besides the suggested positive effects of having a partner, there are also studies suggesting negative effects of having a partner. Verbakel & De Graaf (2009) found that having a partners' career resources, this negatively affects the working hours of the individual. Career resources are

defined as educational and occupational resources, where occupational captures more than the income of the partner. The sample consists of 267,498 Dutch couples being between 15 and 54 years old. The strong negative effects of having a partner on the working hours can partly be explained by contextual factors, according to Verbakel & De Graaf (2009). One of these factors is the welfare state making it less risky for individuals to reduce working hours. However, it can also be argued that if these individuals indeed seek to reduce their working hours, self-employment can be a possible solution, since it offers flexibility. Boden (1999), indeed finds that the flexible working schedule is significant reason for women with at least one child under the age of six, to become self-employed. Schiller and Crewson (1997) found another negative effect of being married. Young individuals who are married, are decidedly less likely to enter self-employment, compared to individuals who did not marry. It can be expected that if the effect of risk-pooling is not dominating, the entrepreneur that just married and might have young children is risk-averse and chooses stable paid-employment above unstable self-employment. Situations in which the risk-pooling effect might not always be dominating, could be when the partner does not have paid-employment or is a part-time worker.

Besides the risk-pooling effect and the easier access to finance being beneficial for couples, another advantage for couples is a larger social network. The network approach to entrepreneurship contains a field of research studying the positive effects of social capital. According to Brüderl and Preisendörfer (1998), there exist two different network approaches to entrepreneurship. The first is the personal network, containing relationships with other business founders as focal persons, and the second is the organizational network consisting of collective relations between new firms. A greater personal network gives access to more critical information, access to customers and suppliers and it may lead to the possibility of a larger financial basis. Due to the larger social network of couples, these advantages can expected to be more dominantly present. Based on a sample of 6,000 businesses in Upper Bavaria, Germany, Brüderl and Preisendörfer (1998) indeed find that support from the personal network of a founder improves the survival and growth rate of newly established businesses. They conclude that support from strong social ties seems to be more important than support from weak ties. Besides the contribution of the partner to the personal network, the entrepreneurial individual also has a family network, in which the partner is present. Brüderl and Preisendörfer (1998) identified mechanisms of the family network that could increase the entrepreneurial access. Having a family network gives access to

unpaid family work and it provides emotional support. They note that emotional support from the spouse might be very helpful to sustain emotional stability, especially in the start-up phase. Sanders and Nee (1996) studied immigrant self-employment amongst immigrants from different ethnic groups in the United States and found that being married and living with the spouse increased the odds of self-employment for each ethnic group. Even though it can be expected that family ties are relatively more important among immigrants compared to other groups, the results show the importance of having a spouse.

In the absence of an extensive welfare state, and studying an older population of possible entrepreneurs, it can be expected that the negative effects of having a partner are dominated by the positive effects of having a partner. These positive effects are the risk-pooling effect, easier access to finance and stronger social ties. Based on these expectations, hypothesis 1a can be formulated.

Hypothesis 1a: For individuals aged 51-65, having a partner, compared to not having a partner, increases the probability of being self-employed versus being paid-employed, ceteris paribus.

When hypothesis 1a cannot be rejected, it can be stated that there exists a positive relationship between having a partner and being self-employed, explaining why Wadhwa et al. (2009) found that most individuals are married at the time they are self-employed. The positive effect of having a partner is mainly expected due to the risk-pooling effect, the easier access to finance and the larger personal network. The total wealth of the household is a good indicator of these benefits, capturing largely all these effects. First of all, the risk-pooling effect refers to the partner having a stable income and enabling the entrepreneurial individual to take risks. The stable income contributes to the total household wealth and is most likely to increase the total household wealth. The wealth also captures the easier access to finance, making it likely that the household wealth is higher due to easier access to finance (Bernhardt, 1994; Le, 1999). Finally, the personal network gives mainly informational and social advantages, but also contributes to more financial opportunities. The total wealth of the household captures a part of the advantage of having a larger social network. It is expected that having a partner is positively associated with the total wealth of the household.

The positive expected association between having a partner and the total wealth of the household could have a significant influence on the probability of being an entrepreneur. The positive association between having initial wealth and starting a business is found in several studies. Evans

and Jovanovic (1989) studied 1,500 wageworkers in the United States and found that wealthier people are more inclined to become entrepreneurs. They reject the explanation that this is because of wealthier people tending to be better entrepreneurs, but they found that less wealthy people have liquidity constraints excluding them from starting their own business. Contradicting this result, Hurst & Lusardi (2004) found that in the United States only for households in the top 5 percent of the wealth distribution, a positive relationship can be found. Only very wealthy households are more likely to start a business, and for other households, they did not find a significant relationship with business formation. They conclude that households still have constraints in obtaining access to finance, but those constraints are not empirically important in deterring small business formation in the United States. Contrary, low-wealth households can be constrained from starting a business, due to limited credit availability and the high capital requirements from starting a business (Hurst & Lusardi, 2004). Both empirical results focus on becoming entrepreneur. Gentry and Hubbard (2001) found that entrepreneurial households own a substantial share of household wealth. Based on a sample of 3,134 households in 1989, 8.4% of them was defined as an entrepreneurial household and together they owned 37.7 percent of the assets and 39.0 percent of net worth. This suggests that having a higher total household wealth increases the probability of being self-employed. Based on these empirical results, it is expected that having a partner is positively associated with having a higher total household wealth, and having a higher total household wealth is positively associated with being self-employed. The expectations are denoted in hypothesis 1b.

Hypothesis 1b: For individuals aged 51-65, the total wealth of the household mediates the positive association between having a partner, compared to not having a partner, and the probability of being self-employed versus being paid-employed, ceteris paribus.

When hypothesis 1b cannot be rejected, this suggests that the positive relationship between having a partner and being an entrepreneur is indeed due to the positive effects of risk-pooling. Having a partner leads to an increase of the total wealth of the household, which in turn leads to an increase in the probability of being entrepreneur. When hypothesis 1b has to be rejected, but hypothesis 1a is not rejected, this suggests that there are other significant mechanisms at present causing the positive effects of having a partner.

2.1.2 The Employment Status of the Partner

In order to gain a deeper insight into the relationship between having a partner and being self-employed, the type of employment of the partner becomes relevant. According to Le (1999), a married person may be more willing to take the risk of becoming self-employed with the financial support of a spouse. This effect is most likely to be present when the partner works, and this work should consist of paid-employment. Indeed, Bernhardt (1994), studying a sample consisting of Canadian men, found that when an individual has a working partner, this enhances the probability of self-employment due to a reduction in the risk of cash flow fluctuations in self-employment. It is also found that the presence of a full-time full-year paid-employed spouse reduces the entrepreneurial individuals' likelihood of leaving the business. It is argued that this shows that steady family income through paid-employment increases the self-employed workers' ability to continue with the business (Lin, Picot & Compton, 2000). Even though it is unknown whether the employment of the spouse influences the probability of being an entrepreneur, it is known that it influences the decision to remain an entrepreneur. For older individuals, having a partner that works enables the older individual to choose an employment type that fits with the current phase of life. Self-employment might then offer the flexibility that the older individual seeks (Boden, 1999). If the business fails to succeed, the older individual is able to rely on the stable income of the partner. Being able to rely financially on the partner, the individual is more likely to be willing to take risks. It can be expected that in a sample of only individuals with partners, having a partner with paid-employment provides a stable background to being self-employed, compared to having a partner that has no income or a less stable income. Based on these findings, hypothesis 2a is formulated.

Hypothesis 2a: For individuals aged 51-65, having a partner that has paid-employment, compared to having a partner that does not have paid-employment, increases the probability of being self-employed versus being paid-employed, ceteris paribus.

When hypothesis 2a cannot be rejected, it shows that having a partner with paid-employment provides a stable situation, enabling the individual to be an entrepreneur. The household situation is expected to be stable because of the income of the partner leading to more financial security. This is also according to the findings of Le (1999), who stated the importance of the financial support of the partner on the willingness of an individual to become an entrepreneur. The

importance of the financial support can be captured in the total wealth of the household as discussed in section 2.1.1. The role of the financial support will be tested by testing hypothesis 2b.

Hypothesis 2b: For individuals aged 51-65, the total wealth of the household mediates the positive association between having a partner that is in paid-employment, compared to having a partner that is not in paid-employment, and the probability of being self-employed versus being paid-employed, ceteris paribus.

If hypothesis 2a and 2b cannot be rejected, then hypothesis 2b shows that having a partner with paid-employment increases the total wealth of the household, and this in turn increases the probability of being self-employed. Contrary, even though little is known about this relationship, we can then expect that when the partner is unemployed, the probability of being self-employed decreases. Unemployment signals that this is involuntary. The uncertainty of not having stable income, nor from the partner, nor from the individual himself, can expected to refrain the individual from being an entrepreneur. Especially when going towards the retirement age and relying on job benefits, transitioning to self-employment becomes less attractive. The individual might prefer stable paid-employment above unstable self-employment. This is stated in hypothesis 2c.

Hypothesis 2c: For individuals aged 51-65, having a partner that is unemployed, compared to having a partner that is not unemployed, decreases the probability of being self-employed versus being paid-employed, ceteris paribus.

Similar to hypothesis 2b, the mediating role of the total wealth of the household will be tested. The total wealth of the household can expected to be lower when the partner is unemployed. This in turn leads to the individual being less likely to be active in entrepreneurship. This mechanism is captured in hypothesis 2d.

Hypothesis 2d: For individuals aged 51-65, the total wealth of the household mediates the negative association between having a partner that is unemployed, compared to having a partner that is not unemployed, and the probability of being self-employed versus being paid-employed, ceteris paribus.

In essence, having a partner with paid-employment is expected to reduce the uncertainty of being self-employed since the individual is able to rely on the stable income of his partner, and this does not occur when the partner is unemployed. This is part of the risk-pooling effect.

Besides the paid-employed partner and the unemployed partner, another determinant of being self-employed could be whether the partner is self-employed or not. Lin, Picot and Compton (2000) found that having a self-employed spouse substantially increases the probability of the other spouse becoming self-employed. They are four times as likely to enter self-employment, compared to when they do not have a self-employed spouse. An explanation that is given is that when the spouse is already self-employed, that entry costs and operating costs are greatly reduced, making it easier to be an entrepreneur. Bruce (1999) studied data from the Panel Study of Income Dynamics (PSID) and found that the presence of a self-employed spouse nearly doubles the probability that a married woman will become self-employed herself. The literature focusses on the probability of becoming self-employed, not on being self-employed. Among older adults, it can be expected that when the spouse has had a business for several years, that the partner joined the business in the course of life. Having a spouse that is an entrepreneur makes it easier for the individual to be an entrepreneur himself. The individual might already be frequently involved with the business of the partner due to the close ties between the partners. Being already involved with the business decreases the entry barriers to being an entrepreneur. Furthermore, it might be beneficial to be an entrepreneur when the partner has a successful business. Advantages could be financially, when the business is successful, socially by spending more time with the partner or more practically by having a more similar work life. The expected positive association is depicted in hypothesis 2e.

Hypothesis 2e: For individuals aged 51-65, having a partner that is self-employed, compared to having a partner that is not self-employed, increases the probability of being self-employed versus being paid-employed, ceteris paribus.

Having a partner that is self-employed, could be positively associated with a higher total household wealth. As was found by Gentry and Hubbard (2001), entrepreneurial households own a substantial share of household wealth. Having a partner that is self-employed signals that the household might be entrepreneurial and owns a substantial share of wealth. A higher total wealth of the household is associated with a higher probability of being self-employed, since it enables the individual to

continue with his business. Therefore, the role of the total wealth of the household is summarized in hypothesis 2f.

Hypothesis 2f: For individuals aged 51-65, the total wealth of the household mediates the positive association between having a partner that is self-employed, compared to having a partner that is not self-employed, and the probability of being self-employed versus being paid-employed, ceteris paribus.

By testing hypotheses 2a till 2f, a deeper understanding is obtained for the expected relationship captured in hypothesis 1a. It should be noted that by testing these hypotheses, the reference group also consists of individuals from one of the two remaining employment types. A clear distinction is expected between the effect of having an unemployed partner and having a paid- or self-employed partner due to a significant difference in financial certainty. It can be expected that the effect having a partner that has paid-employment or having a partner that is self-employed on the probability of being self-employed is roughly similar. Having a partner with paid-employment offers more financial certainty, compared to having a partner that is self-employed. This might increase the willingness of the individual to take risks even more, and with that, it increases the willingness to be an entrepreneur. However, having a partner that is self-employed decreases the barriers to being an entrepreneur, which in turn increasing the willingness to be an entrepreneur. Both types of employment of the partner are expected to induce the willingness to be an entrepreneur and therefore are expected to have a roughly similar effect.

2.1.3 The Physical Health of the Partner

Besides the presence of a partner and their occupation, another part of the family-to-work spill overs is the health of the partner. In the literature, this determinant of being entrepreneurial has not been studied yet. There exist some studies that indicate a possible direction in the relationship between having a partner in poor health and the probability of being an entrepreneur. Fairlie, Kapur and Gates (2011) studied the effect of bad health and having health insurance on business creation. They found a negative effect of health insurance demand on business creation for individuals without spousal coverage, compared to individuals with spousal coverage. Their findings relate more to the health status of the individual potentially becoming entrepreneur, and says less about the health status of the partner. According to Pavalko and Henderson (2006), there are two possible effects of caring for your partner. The first effect is that combining caring for your partner and

paid-employment creates greater strains on individuals, than these roles demand on their own. The effect of taking care of an ill or disabled partner affects the workplace. Also, research has shown that the mental and physical health of the caring individual reduces due to taking care of their ill partner (Hong & Seltzer, 1995; Martire, Stephens & Atienza, 1997; Pavalko and Woodbury, 2000). The reduction in health can in turn lead to a reduction in the hours worked. This is the second effect that Pavalko and Henderson (2006) signalled. It is likely that the caring partner is less able to spend time on setting up a business or being in business. Especially among the older adults, through both effects, the health of the partner can expected to significantly and more dominantly influence the probability of being self-employed. This expectation is denoted in hypothesis 3a.

Hypothesis 3a: For individuals aged 51-65, having a partner with poor health, compared to having a partner with excellent health, decreases the probability of being self-employed versus being paid-employed, ceteris paribus.

When the hypothesis cannot be rejected, it shows that the poor health condition of the partner significantly limits the entrepreneurial individual in his or her decision to be self-employed. A possible reason why the health of the partner might limit the individual is due to a decrease in own health of the individual. It can be expected that the individual spends time on taking care of his partner, as well as more time on housekeeping and taking care of possible children. This can be exhausting (Hong & Seltzer, 1995; Martire, Stephens & Atienza, 1997; Pavalko and Woodbury, 2000). It can be expected that having a partner with poor health, decreases the health of the entrepreneurial individual. When the health of the entrepreneurial individual decreases, this might influence the probability of being self-employed. Zissimopoulos and Karoly (2007) used data of the Health and Retirement Study (HRS) and found that poor health among the individuals aged 51-65 is a push factor into entrepreneurship. Poor health is measured by the presence of work-limiting health conditions. Older workers move to self-employment since it enables them to better accommodate with their health condition and continue working. However, their findings are about becoming an entrepreneur. Based on the same dataset, Rietveld, Kippersluis and Thurik (2015) found that on average, healthier people select into self-employment. The self-employed are generally healthier than wageworkers, both in subjective terms as objective terms. Due to the selection effect being large enough, a positive association between self-employment and health is found, but they argue that this might not be due to self-employment having a positive effect on

health. When the selection effect dominates, this might rule out a possible negative effect of self-employment on health. Based on these empirical findings, it can be expected that a reduction in own health of the individual, decreases the probability of being self-employed since the health condition might push the individual towards an entrepreneurial exit or retirement. The expected association between the health of the partner and the health of the entrepreneurial individual and the association between health of the individual and the probability of being self-employed is summarized in hypothesis 3b.

Hypothesis 3b: For individuals aged 51-65, the health of the individual mediates the negative association between having a partner with poor health, compared to having a partner with excellent health, and being self-employed versus being paid-employed, ceteris paribus.

If hypothesis 3b cannot be rejected, this shows that due to the poor health of the partner, the own health of the individual also decreases and this limits him in being self-employed.

Another reason for having a partner in poor health limiting the entrepreneurial individual, besides worse own health, is that the individual has to spend significant time taking care of his or her partner with poor health, reducing the time available for working or setting up a business. Pavalko and Artis (1997) found that women that started caring for an ill friend or an ill relative are more likely to reduce employment hours. This was also found by Ettner (1996). He found that women that started caring for their elderly parents significantly reduced their working hours. There are two mechanisms influencing the association between the hours worked and the probability of being self-employed. First of all, being self-employed offers flexibility that is needed to adjust the working hours when a partner is in poor health (Boden, 1999). This may increase the probability of an individual being self-employed. Zissimopoulos and Karoly (2007) also argued that paid-workers may select into self-employment enabling them to reduce their working hours. However, being self-employed in general requires a significant amount of time from the entrepreneur. Jamal (1997) compared Canadian self-employed workers and salaried employees, and he found that the self-employed put on average 32 percent more time in work per week than the salaried employees. Eden (1975) also studied the working hours of the self-employed and compared them with the working hours of organizational members. He found that the self-employed, on average, work over 10 hours more per week than the members. Another finding was that a higher proportion of the self-employed had irregular work schemes. The empirical findings show that self-employment

requires the individual to work more hours, even though it might be more flexible. Therefore, it can be expected that a reduction of the working hours has a negative effect on the probability of being entrepreneur. Hypothesis 3c describes the expected effect between the poor health of a partner, the hours worked by the individual and the probability of being self-employed.

Hypothesis 3c: For individuals aged 51-65, the hours worked by the individual mediates the negative association between having a partner with poor health, compared to having a partner with excellent health, and being self-employed versus being paid-employed, ceteris paribus.

When hypothesis 3c cannot be rejected, it follows that taking care of the partner with poor health indeed requires significant time, reducing the available hours of the entrepreneurial individual to work.

2.1.4 The Mental Health of the Partner

Besides having a partner with bad physical health, it is also possible to have a partner with bad mental health. These partners require less physical time to take care of, but it still may have significant influence on the partner. The mental instability leads to a less stable household and increases the risks from being an entrepreneur. Similar to the relationship between bad physical health of the partner and being an entrepreneur, not much is known about the effects of having a partner with poor mental health. Benazon and Coyne (2000) found that spouses living with a depressed partner reported a significantly more depressed mood compared to the general population. It can be expected that when an individual felt depressed, this influences his entrepreneurial activity. Indeed, Hessels et al. (2017) show that depression is significantly and positively related to entrepreneurial exit. The mechanism that the authors use to explain their argument, is that due to depression, individuals have a reduced self-efficacy, which reduces the probability of functioning well in entrepreneurship. The entrepreneurs have deteriorated beliefs about their functioning, increasing the probability of them leaving self-employment. Given that individuals who are depressed are pushed towards an entrepreneurial exit, it can be expected that the probability of being self-employed decreases. Overall, it can be expected that having a partner with poor mental health is demanding for the entrepreneurial individual. It most likely will not induce his probability of being entrepreneurial but reduce this probability. This is defined in hypothesis 4a.

Hypothesis 4a: For individuals aged 51-65, having a partner that felt depressed, compared to having a partner that did not feel depressed, decreases the probability of being self-employed versus being paid-employed, ceteris paribus.

When hypothesis 4a cannot be rejected, it shows that having a partner that felt depressed, significantly influences the decision of the entrepreneurial individual being self-employed. This can partly be explained by the individual himself having a depressed mood. This was found by Benazon and Coyne (2000). When the partner felt depressed, this depresses the mood of the entrepreneurial individual. Of the individuals in the sample with a depressed partner, 6% of the spouses even met the criteria for major depression. When determining a possible relationship, it is most likely that having a depressed partner is positively associated with the entrepreneurial individual being depressed. It can be expected that in order to be self-employed, the entrepreneurial individual requires good mental health. This is confirmed by a study of Jamal (1997), who found that the self-employed, on average, have a better mental health status. He also found that the self-employed have more job stress and more psychomatic health problems, which shows that self-employment is mentally more demanding. These findings show that in order to be successfully self-employed, the individual should have good mental health. This is also valid for older individuals. When they are self-employed, they could leave self-employment to retire. This probability might increase when their self-efficacy reduces. Therefore, it is expected that the worse mental health of an older entrepreneurial individual is negatively related to the probability of being self-employed. The expected relationships are denoted in hypothesis 4b.

Hypothesis 4b: For individuals aged 51-65, the entrepreneurial individual being depressed mediates the negative association between having a depressed partner, compared to having a partner that is not depressed, and the probability of being self-employed versus being paid-employed, ceteris paribus.

When hypothesis 4b cannot be rejected, it shows that the depressed partner causes the entrepreneurial individual to be depressed himself and in turn, causes the entrepreneurial individual to be less likely to be self-employed.

2.2 Entrepreneurial Exit

In order to more completely understand the influence of the partner on the entrepreneurial activity of an individual, another interesting analysis is to analyze the effects of having a partner on the probability of an entrepreneurial exit. According to DeTienne (2010, p. 203), entrepreneurial exit is 'the process by which the founders of privately held firms leave the firm they helped to create. Thereby, they remove themselves, in varying degree, from the primary ownership and decision-making structure of the firm.' According to Wennberg and DeTienne (2014), this definition is about the decision to leave the firm but it can also be more than just leaving the firm, it can also be about leaving entrepreneurship as a career path. Hessels et al. (2011) found that a recent exit decreases the probability of not undertaking subsequent entrepreneurial activity. Based on survey-data on the individual-level for 24 countries from the Global Entrepreneurship Monitor (GEM), it was found that a recent exit increases the probability of being a potential or intentional entrepreneur. Potential and intentional entrepreneurship represent stages of entrepreneurial activity. The positive effect can be explained by the individuals having more relevant entrepreneurial skills and being more likely to perceive entrepreneurial opportunities. The findings capture both types of entrepreneurial exits, where individuals leave a firm, but also might temporarily leave entrepreneurship. However, the findings show that the individuals are less likely to leave entrepreneurship as a career path for good. In this study, both types of entrepreneurial exit are taken into account.

2.2.1 The Presence of a Partner

Similar to the main analysis, in this section the presence of the partner will be studied. Exit intentions are likely to be tied to the motivation of the entrepreneur to start-up a business. A venture can be created to be a supplement to the current income, and as soon as the current income is high enough, the venture can be shut down. However, when the founder created the firm to provide income replacement and family stability, then the business might continue to exist longer (Wennberg & DeTienne, 2014). This signals that having a partner, which in general creates a stabile family situation, reduces the probability of an entrepreneurial exit. Ronstadt (1986) studied the reasons for entrepreneurial exits in different stages of entrepreneurship. He found that among the group of early exits, those exiting between three and six years of being self-employed, personal and family factors were less important, compared to the group of later exits, those exiting after 15

years or more of being self-employed. However, financial factors were clearly more important and playing an important role in the exits for both early and late exits. In this study, the group of interest consists of older adults, from which it is likely that they, on average, have more late exits than early exits. Therefore, it can be expected that family plays a role in the exit decision. Lin, Picot and Compton (2000) found evidence that steady family income, provided by a spouse with paid-employment, increases the affordability for the entrepreneurial individual to continue with the business, and therefore it reduces the probability of an entrepreneurial exit. Wellington (2001) argued that an individual's labor supply depends partly on spousal characteristics. One of the factors that might influence the labor supply of an individual is whether he or she has access to health insurance coverage through the spouse. It was also found that access to health insurance coverage through the spouse, increases the likelihood of participation in self-employment. This suggests that having a spouse that works, enables the individual to rely on the spousal's health insurance and therefore enables an individual to continue to be self-employed. Because of these empirical findings, it can be expected that having a partner, compared to not having a partner, decreases the probability of entrepreneurial exit, since the positive effects of having a partner are expected to have a positive influence on the ability of the individual to continue with the business. This is summarized in hypothesis 5a.

Hypothesis 5a: For individuals aged 51-65, having a partner, compared to not having a partner, decreases the probability of an entrepreneurial exit, ceteris paribus.

The findings of the study of Lin, Picot and Compton (2000) showed that the presence of the partner reduces the probability of entrepreneurial exits through the income of the partner, providing stable family income. Having a partner that works, increases the total wealth of the household, and as was discussed in section 2.1, this in turn is expected to be positively associated with being entrepreneurial. Having a higher total household wealth enables the individual to continue with being an entrepreneur and prevents the individual from being forced to exit entrepreneurship. The findings of Lin, Picot and Compton (2000) are tested in hypothesis 5b, only now for individuals aged 51 till 65.

Hypothesis 5b: For individuals aged 51-65, the total wealth of the household mediates the negative association between having a partner and the probability of an entrepreneurial exit, ceteris paribus.

2.2.2 The Employment of the Partner

To study more specific the effects of having a partner on the probability of an entrepreneurial exit, hypothesis 6a captures the effect of having a partner that works, compared to having a partner that does not work. The group of interest here is the group of self-employed in which everyone has a partner. Karoly and Zissimopoulos (2004) found that access to retiree health benefits increases the probability of retirement. Individuals aged 51-65 are going towards retirement, and having retiree health benefits might induce individuals to exit entrepreneurship earlier than when there is no access to retiree health benefits. These benefits can be obtained through own previous employment, but also when the spouse has paid-employment. Therefore, having a spouse that works and gives access to benefits, might increase the probability of entrepreneurial exit. However, based on the study of Lin, Picot and Compton (2000) it can be expected that having a partner that works, compared to having a partner that does not work, decreases the probability of an entrepreneurial exit, since the income of the partner provides stability. Even though the business might financially not be beneficial, the stable income of the spouse might induce the entrepreneurial individual to continue with the business. However, since the group of interest is between 51 and 65 years old, it can be expected that the retirement effect is stronger. Based on data from the Health and Retirement Study (HRS), Pienta (2003) states that the marital context might equalize the decision to retire. This indicates that partners might retire simultaneously. Having a partner that works for pay then increases the barrier to exit entrepreneurship and retire. Based on these findings, it is expected that having a partner that works, compared to having a partner does not work, decreases the probability of leaving self-employment. This is summarized in hypothesis 6a.

Hypothesis 6a: For individuals aged 51-65, having a partner that works, compared to having a partner that does not work, decreases the probability of an entrepreneurial exit, ceteris paribus.

Besides the access to retiree benefits, having a partner that works is also more likely to have contributed to the total wealth of the household. At the Third Age, which are individuals aged 51-65, it can be expected that the total wealth of the household is higher when there is a partner present that works for pay. It is more likely that these partners worked for pay during the course of their lives, which leads to an accumulation of total household wealth. Then, the wealth is higher compared to individuals who have a partner that does not or did not work for pay. When the wealth

of the household is higher, it can be expected that the entrepreneurial individual is more likely to decide to retire and quit being self-employed. This was also found by Karoly and Zissimopoulos (2004). They found that for entrepreneurial men, their probability of retirement increases as the wage of the wife increases. Therefore, there are two possible effects that can be expected. The income of the partner enabling the individual to continue with the business, and the income of the partner enabling the individual to retire. It can be expected that when the individual becomes older, the second effect becomes more dominating. However, since retirement in the age group of 51 until 65 is only a marginal phenomenon, it can be expected that the first effect is still dominating. Hypothesis 6b is tested to find whether the expected association is mediated through the income of the partner, which is captured by the total wealth of the household.

Hypothesis 6b: For individuals aged 51-65, the total wealth of the household mediates the negative association between having a partner that works, compared to having a partner that does not work, and the probability of an entrepreneurial exit, ceteris paribus.

Contrary to the expectations around being an entrepreneur and having a partner that is unemployed, the expectations about the association between the probability of an entrepreneurial exit and having an unemployed partner differ. It was expected that having an unemployed partner decreases the probability of being an entrepreneur. However, when the individual did become an entrepreneur, and the partner is unemployed, it can be expected that the individual is forced to remain working as an entrepreneur to provide income for the household. The individual might continue to work, since he cannot rely on the income of the partner. This is summarized in hypothesis 6c.

Hypothesis 6c: For individuals aged 51-65, having a partner that is unemployed, compared to having a partner that is not unemployed, decreases the probability of an entrepreneurial exit, ceteris paribus.

Following from having a partner that is unemployed, it is likely that the total wealth of the household is lower, compared to when having a partner that has paid-employment. As found by Karoly and Zissimopoulos (2004), when the entrepreneurial individual has access to health benefits through the employer of their spouse, the probability of retirement increases. However, when the partner is unemployed, the individual does not have access to the health benefits of the employer of the spouse. This might reduce the probability of an entrepreneurial exit, requiring the individual to continue with the business. The health benefits can be captured by the total wealth of

the household. Also, having lower total household wealth might even force the individual to remain an entrepreneur in order to provide an income. This increases the dependence on the self-employment of the entrepreneurial individual. The expectations are summarized in hypothesis 6d.

Hypothesis 6d: For individuals aged 51-65, the total wealth of the household mediates the negative association between having a partner that is unemployed, compared to having a partner that is not unemployed, and the probability of an entrepreneurial exit.

Besides the employment types of paid-employment and unemployment, the partner could also be self-employed. As discussed in detail in section 2.1, Karoly and Zissomopoulos (2004) studied the effects of having a self-employed partner. They found that self-employed workers were more likely to have a spouse who also is self-employed. The spouse and the partner might have a business together and both consider themselves to be self-employed. The decision to quit self-employment then, becomes a decision that affects both the entrepreneurial individual and the partner. Moreover, when both partners exit self-employment, it can be expected that the household does not have any income after the entrepreneurial exit. This increases the barrier to an entrepreneurial exit. In the literature, little is known about the relationship between having a self-employed partner and the probability of exiting entrepreneurship. However, it can be expected that having a self-employed partner that is active in the same business, enables the business to continue longer. When one of the two partners, due to age limitations, health limitations or other causes, is not able to spend as much time in the business as before, the other partner might step in and help the business to continue. Besides having a partner that works in the same business, having a partner that is self-employed in a different business is also expected to reduce the probability of an entrepreneurial exit. Due to both individuals being self-employed, retirement benefits can expected to be low. This in turn requires significant household wealth before the individuals retire, and therefore decreases the probability of an entrepreneurial exit. Therefore, together with the increased barrier to exit, it can be expected that due to having a partner that is also self-employed, the probability of an entrepreneurial exit decreases. This is captured in hypothesis 6e.

Hypothesis 6e: For individuals aged 51-65, having a partner that is self-employed, compared to having a partner that is not self-employed, decreases the probability of an entrepreneurial exit, ceteris paribus.

Besides the support of the partner in the business, having a partner that is self-employed is expected to be positively related to the total wealth of the household. Both individuals have an income from the business, increasing the total wealth of the household. At the Third Age, the effect of having a higher total household wealth can be twofold. First, having a higher wealth could increase the likelihood of an entrepreneurial exit, making it able to retire. Second, a higher total wealth of the household signals that the business is profitable, increasing the opportunity costs of exiting entrepreneurship. Having both individuals working in the business, it can be expected that the second effect is dominating. Another possibility is that the partner is self-employed, only in a different business. These expectations lead to hypothesis 6f.

Hypothesis 6f: For individuals aged 51-65, the total wealth of the household mediates the negative association between having a partner that is self-employed, compared to having a partner that is not self-employed, and the probability of an entrepreneurial exit.

Given the three types of employment status, it was expected that having a partner that works for pay and having a partner that is self-employed have a roughly similar effect on the probability of being self-employed. However, having a partner that is self-employed might be a larger barrier to entrepreneurial exit than having a partner that has paid-employment. The self-employed partner might be working in the same business, and the retirement of the partner is most likely to also include the retirement of the entrepreneurial individual. Given that retirement benefits are small or absent, the decision of both the individuals to retire has significantly more impact than the entrepreneurial individual that exits when his or her partner has paid-employment. With the hypotheses 6a till 6f, the significance and direction of the effects of having a partner with different types of employment is tested.

2.2.3 The Physical Health of the Partner

Similar to the analysis of the probability of being entrepreneur, and besides the employment type of the partner, it can be expected that the health of the partner influences the probability of an entrepreneurial exit. The health of the individuals becomes a more significant issue for individuals in their Third Age. Karoly and Zissomopoulos (2004) studied the effect of the health of the partner, and they found that the presence of a work limiting health condition for the spouse raises the probability of retirement for an entrepreneurial woman. In this case, the partner has a work limiting health condition, leading to the exit of the self-employed woman. At the same time, they found

that having a spouse with poor health, reduces the probability of becoming self-employed, even though it could be expected that self-employment offers more flexibility. The empirical results show that the health of the partner influences the possible entrepreneurial spouse. Especially in a traditional household, having a partner with poor health might require the self-employed woman to quit her business and start caring for her husband. Besides the negative effects on the entrepreneurial activity, it is expected that the household relies more heavily on the income from the healthy partner making the entrepreneurial activity more important. However, for older individuals, it could be expected that this effect becomes smaller due to an accumulation of wealth over the course of their lives, decreasing the dependency on income. In general, having a partner with poor health, compared to having a partner with very good or excellent health, requires time and energy from the partner. Even though little more is known about this relationship, it can be expected that the poor health of the partner might lead to an entrepreneurial exit by the self-employed individual. This is stated in hypothesis 7a.

Hypothesis 7a: For individuals aged 51-65, having a partner with poor health, compared to having a partner with very good or excellent health, increases the probability of an entrepreneurial exit, ceteris paribus.

A possible reason for the health of the partner limiting the entrepreneurial individual is due to a decrease in own health of the individual, as was also the expectation in the main analysis. It can be expected that the individual spends time on taking care of his partner, as well as more time on housekeeping and taking care of possible children. This can be exhausting (Hong & Seltzer, 1995; Martire, Stephens & Atienza, 1997; Pavalko and Woodbury, 2000). Even though there do not exist empirical studies studying the effect of health on an entrepreneurial exit, it can be expected that due to a decrease in own health, the probability of an entrepreneurial exit increases. This expectation is formulated in hypothesis 7b.

Hypothesis 7b: For individuals aged 51-65, the own health of the individual mediates the positive association between having a partner with poor health, compared to having a partner with very good or excellent health, and the probability of an entrepreneurial exit.

Besides a reduction in the health of the entrepreneurial individual, it could also be expected that the individual has less time to spend in the business. Pavalko and Artis (1997) found that women that started caring for an ill friend or an ill relative are more likely to reduce employment hours.

This was also found by Ettner (1996). He found that women that started caring for their elderly parents significantly reduced their working hours. Karoly and Zissomopoulos (2004) also signaled the reduction in working hours, and contrary to the expectations, they found that women were not more likely to become self-employed and have more flexible working hours. It can be seen that self-employment might not provide the flexibility that is needed when taking care for a partner in poor health, increasing the probability of an entrepreneurial exit. This is formulated in hypothesis 7c.

Hypothesis 7c: For individuals aged 51-65, the hours worked by the individual mediates the positive association between having a partner with poor health, compared to having a partner with very good or excellent health, and the probability of an entrepreneurial exit.

2.2.4 The Mental Health of the Partner

Besides the poor physical health of the partner, it can also be expected that poor mental health of the partner influences the decision to exit entrepreneurship. The underlying mechanism would be that having a partner that felt depressed, increases the probability of the entrepreneurial individual being depressed, which in turn increases the probability of exiting entrepreneurship. Indeed, as discussed in section 2.1, Benazon and Coyne (2000) found that spouses living with a depressed partner reported a significantly more depressed mood compared to the general population. Hessels et al. (2017) argued that survival in entrepreneurship is less likely for depressed individuals. In other words, it can be expected that being depressed, increases the probability of an entrepreneurial exit. The mechanism that the authors use to explain their argument, is that due to depression, individuals have a reduced self-efficacy, which reduces the probability of functioning well in entrepreneurship. The entrepreneurs have deteriorated beliefs about their functioning, increasing the probability of them leaving self-employment. Based on a representative sample of the Australian population, they found that a one-unit increase in depression, increases the probability of entrepreneurial exit by 1.1 percentage-points. The path seems to be involuntary, since the ex-entrepreneurs are more likely to seek wage work or are in unemployment, compared to a position outside the labor force. Overall, this study shows that due to poor mental health, individuals might be forced to exit self-employment. Based on the empirical findings, hypothesis 8a and 8b are formulated.

Hypothesis 8a: For individuals aged 51-65, having a partner that felt depressed, compared to having a partner that is not depressed, increases the probability of an entrepreneurial exit, ceteris paribus.

Hypothesis 8b: For individuals aged 51-65, the own mental health of the individual mediates the positive association between having a partner that felt depressed, compared to having a partner that is not depressed, and the probability of an entrepreneurial exit.

3. Data and Methods

In order to test the hypotheses, longitudinal data is used from the Health and Retirement Study (HRS). The HRS is an American national survey among individuals with an age between 51 and 65 and their spouses. In the older entrepreneurship literature, this group is also referred to as 'Third Age' (Kautonen, 2008). Variables are derived from core interviews, covering a large range of measures. The data includes twelve waves between 1992 and 2014 with five entry cohorts. These cohorts contain the initial Health and Retirement Study cohort in 1992, the Study of Assets and Health Dynamics cohort in 1993, the Children of Depression and War Baby cohort, entering in 1998, the Early Baby Boomer cohort in 2004 and the last cohort is the Mid Baby Boomer cohort in 2010 (RAND Corporation, 2018). The original dataset contains 37,495 observations and 11,094 variables. To study the dynamics regarding being an entrepreneur and exiting entrepreneur, two samples are composed. In this section, both samples will be discussed separately.

3.1 Being an Entrepreneur

3.1.1 Data

To determine the relationship between the explanatory partner variables and the probability of being an entrepreneur, adjustments are made in the data. First of all, the panel data is converted from a wide form to a long form, such that for each wave, the data is in a separate observation. Secondly, individuals with an age below 51 are removed from the sample, as well as above 65. The original survey was among individuals with an age between 51 and 65. Individuals with an age that is outside this range, are considered to be outliers. The spouses of the individuals are allowed to have an age outside the range of 51-65, since they were not the subject of the interview and an individual and his spouse can differ significantly in age. Another adjustment that is made

to the dataset is the removal of the individuals who are retired. It is less likely that they will be an entrepreneur. When they do enter self-employment, it is more likely that this is a hobby or a way to spend time, and less likely that it is a serious attempt to set up a business. Leaving this group in the sample would bias the results. Another adjustment is the removal of individuals who are not working, leaving the group of paid-employed and self-employed in the sample. The last adjustments is the removal of the observations containing negative total household wealth. Only a few individuals have negative household wealth, and even though it is possible to have debts, this does not equal wealth, which contains more than monetary measures. After the adjustments, the dataset consists of 59,452 observations and 10,849 variables. In the following sections, the variables will be described in more detail.

3.1.2 Dependent Variable

in_selfemployed is a dummy variable indicating whether an individual is self-employed. *in* denotes that the variable is about the individual of interest. The respondents answered the question '*Do you work for someone else, are you self-employed, or what?'*. The variable equals 1 if the individual answered to be self-employed and 0 if he is not self-employed and works for someone else. Individuals who do not work are not included in the analysis but were already removed from the sample. In table 1, the descriptive statistics of the variable *in_selfemployed* are depicted. It can be seen that 19.0% of the sample is currently enrolled in self-employment.

Table 1: Descriptive Statistics of the Dependent Variable *in_selfemployed*

Variable	**Number of Observations**	**Mean**	**Standard Deviation**
in_selfemployed [0/1]	59,452	0.190	0.392

3.1.3 Independent Variables

To test the four hypotheses, there are six independent variables indicating whether a partner is present and indicating the partner characteristics. The descriptive statistics of the independent variables are depicted in table 2.

Table 2: Descriptive Statistics of the Independent Variables

Binary Independent Variables	Number of Observations	Mean	Standard Deviation
partner [0/1]	59,414	0.768	0.422
par_work [0/1]	43,977	0.690	0.462
par_unemployed [0/1]	31,526	0.037	0.189
par_selfemployed [0/1]	30,310	0.212	0.409
par_poorhealth [0/1]	24,696	0.083	0.276
par_depressed [0/1]	36,221	0.112	0.315

partner is a dummy variable indicating whether an individual has a partner. The variable is based on the marital status of an individual. The value of the variable equals 1 if the individual indicates that he or she is married, or when the individual indicates to be partnered. The value equals 0 if the individual is separated, divorced, widowed or never married. The value also equals 0 if the individual is married but the spouse is absent. In these situations, the positive effects of having a partner are absent, since it is most likely that these partners do not support each other financially and therefore there is no risk-pooling. However, in the situations where the individual is not married but said to have a partner, it can be expected that the risk-pooling effects can be at present. In the sample, 76.8% of the individuals has a partner.

par_work is a dummy variable indicating whether an individual has a partner that has paid-employment, or has a partner without paid-employment. *par* indicates that the variable is about the partner. The partner was asked the question if he or she was doing any work for pay at the present time. The variable equals 1 if the partner works for pay, and 0 if the partner does not work for pay. In the sample, 69.0% of the partners works for pay. It should be noted that working for pay could for some individuals also consist of being self-employed.

par_unemployed is a dummy variable indicating whether an individual has a partner that is unemployed. The value equals 1 if the partner is indeed unemployed, and equals 0 if the partner is not unemployed. The partner is then in wage-work, self-employment or otherwise. From the individuals who has a partner, 3.7% has a partner that is unemployed.

par_selfemployed is a dummy variable indicating whether an individual has a partner that is self-employed. If the variable equals 1, the partner of the individual is self-employed, and if the variable equals 0, the partner is not self-employed. From the individuals who has a partner, 21.2% has a partner that is self-employed. Again, it should be noted that a partner that is self-employed, also could have indicated to be working for pay.

par_poorhealth is a binary variable indicating the self-reported health of the spouse. The variable is constructed based on a categorical variable that indicates the health of the partner. The first category represents excellent health, the second represents very good health, the third is good health, the fourth is fair health and the fifth is poor health. The binary variable is constructed by including the individuals with health that is 'excellent' or 'very good' and the individuals with health that is 'poor'. When the partner has poor health, the variable equals 1, and 0 when the health is excellent or very good. It can be expected that only individuals who have a partner with poor health are influenced in their decision of being self-employed or not. To create a sharp contrast, only the extreme categories are taken, with the very healthy individuals as reference category and the individuals with poor health as the category of interest. In the sample, 8.3% of the partners has poor health.

par_depressed is a dummy variable indicating whether the spouse felt depressed or not. The value equals 1 if the spouse felt depressed, and 0 otherwise. The classification is based on the question whether the individual felt depressed. In the sample, 11.2% of the partners felt depressed.

3.1.4 Descriptive Statistics and Correlations

In table 3, the descriptive statistics are given for the independent variables in the group of interest, the self-employed, and the reference group, the paid-employed. Of the self-employed, 81.9% has a partner, compared to 75.6% of the paid-employed group. The incidence of a partner at present is higher amongst the group of self-employed. In the group of self-employed, the incidence of having a partner that works is also higher, compared to the group of paid-employed individuals. Of the entrepreneurial individuals' partners, 72.5% works for pay, whilst only 68.1% of the partners of the paid-employed group works for pay. Another interesting observation is that of the self-employed with partners, 40.9% has a partner that is self-employed, as opposed to only 15.9% of the paid-employed with partners has a partner that is self-employed. Furthermore, it can be seen that the entrepreneurial individuals have partners with a lower incidence of unemployment, poor

health and depression, compared to the partners of the paid-employed individuals. Overall, the self-employed are more likely to have a partner, and the presence is more positive. In the group of self-employed, more partners work, less are unemployed, more are self-employed, partners have a better health and less partners felt depressed, relatively to the group of paid-employed individuals with partners.

Table 3: Descriptive Statistics of the Independent Variables for the group of self-employed and the reference group.

	Self-Employed			**Paid-Employed**		
Independent Variable	**Observations**	**Mean**	**Std. Dev.**	**Observations**	**Mean**	**Std. Dev.**
partner [0/1]	11,284	0.819	0.385	48,130	0.756	0.430
par_work [0/1]	8,909	0.725	0.447	35,068	0.681	0.466
par_unemployed [0/1]	6,632	0.026	0.159	24,894	0.040	0.196
par_selfemployed [0/1]	6,445	0.409	0.492	23,865	0.159	0.366
par_poorhealth [0/1]	5,394	0.062	0.241	19,302	0.089	0.285
par_depressed [0/1]	7,309	0.104	0.305	28,912	0.114	0.318

In table 4, a correlation matrix is depicted, giving more detailed information about the sign and magnitudes of the associations. The correlations seem to support the hypotheses. It can be seen that having a partner and being self-employed are positively associated, as well as having a working partner or self-employed partner and being self-employed. It can also be seen that unemployment of the partner and being self-employed is negatively associated, as well as poor health of the partner and depression of the partner and being self-employed. The correlations provide support for the hypotheses. Besides the correlations between the variable of interest, being self-employed, and the independent variables, the correlations between the independent variables are also depicted in table 4. Having a partner and having a working partner are positively associated, showing that a large share of the partners are working, also explaining the negative correlation between unemployment of the partner and having a partner. Having a working partner and having a partner that is unemployed are perfectly negatively correlated. This can be explained by that the two variables exclude each other. For having a partner that is self-employed and having a partner that is unemployed, no correlation can be found. Having a partner with poor health and having a partner that works are negatively correlated, which can be explained by the poor health

of the partner being a barrier to working for pay by the partner. The positive correlation between having a partner with poor health and having a partner that is unemployed is intuitive. The negative correlation between having a depressed partner and having a partner that works is also intuitive, since it can be expected that depressed partners on average are less likely to work, which is confirmed by the positive correlation between having a partner that is felt depressed and having a partner that is unemployed. Finally, having a partner that felt depressed and having a partner that has poor health is relatively strongly positively associated. The relative high correlation is intuitive, since the mental and physical health of the individual are strongly related.

Table 4: Pairwise Correlation Matrix

	in_selfemployed	*partner*	*par_work*	*par_unemployed*	*par_selfemployed*	*par_poorhealth*	*par_depressed*
in_selfemployed	1.000						
partner	0.059	1.000					
par_work	0.038	0.020	1.000				
par_unemployed	-0.030	-0.003	-1.000	1.000			
par_selfemployed	0.250	0.006	-0.018	-	1.000		
par_poorhealth	-0.040	-0.041	-0.360	0.078	0.027	1.000	
par_depressed	-0.013	-0.020	-0.131	0.066	0.0003	0.339	1.000

3.1.5 Mediators

To determine the effect of having a partner and partner stability on the probability of being an entrepreneur, several mediators are tested. The mediators are depicted in table 5. To test the overall effect of having a partner, compared to not having a partner, on the probability of being an entrepreneur, the total wealth of the household is tested on a possible mediating effect. The wealth of the household is denoted by *hh_wealthcat. hh_wealthcat* is a categorical variable indicating the total wealth of the household. *hh* indicates that the variable is about the household. The variable consists of 11 categories, and is constructed based on a continuous variable indicating the total wealth of a household. In order to enable this variable to be included as a mediator, the categories are constructed and the variable is included as a continuous variable, which is possible considering the number of categories and the ordered characteristic of the variable. The first category consists of households with a total wealth between 0 and 50,000 US dollars. The eleventh category consists

of households with a total wealth of 500,000 US dollars and above. The average wealth equals 326425.1 US dollars. This variable is used as an indicator of the difference in wealth between individuals with and without partners. The mediator indicating the individuals' own health is denoted by *in_health*. This variable is also a categorical variable, with ordered categories. The variable will be added to the analysis as a continuous variable to enable the variable to be a mediator. The categories are ordered and consist of *excellent*, *very good*, *good*, *fair* and *poor* health. Contrary to the variable *par_health*, all the categories are left into the analysis, since it can be expected that poor health of the partner can lead to smaller changes in health of the individual, contrary to the health of the partner, which is expected to only influence the individual if the health is poor. The ordering of the categories, from category 1 till 5, enables this variable to be added to the analysis as a continuous mediating variable. The variable for the hours worked, *in_hoursworked*, describes how many hours the individual worked on his primary job. It can be seen that the individuals in the sample on average, work 39.6 hours a week. The last mediator is *in_depressed*, indicating whether the individual felt depressed. As can be seen in table 5, 10.2% of the individuals in the sample is said to be depressed.

Table 5: Descriptive Statistics of the Mediators

Categorical Variable	**Number of Observations**	**Mean**	**Standard Deviation**
hh_wealthcat[1]	59,452	4.407	3.517
in_health[2]	59,438	2.424	0.991
Continuous Variable	**Number of observations**	**Mean**	**Standard Deviation**
in_hoursworked	58,703	39.602	13.717
Binary Variable	**Number of observations**	**Mean**	**Standard Deviation**
in_depressed [0/1]	49,734	0.102	0.302

[1] Descriptive Statistics of the categories of *hh_wealthcat* are available on request of the author

[2] Descriptive Statistics of the categories of *in_health* are available on request of the author

3.1.6 Controls

As control variables, several variables are added. First, a dummy variable *in_gender* is included to control for gender, indicating 1 if the individual is a male, and 2 if the individual is a female. The variable is added to control for the fact that males are more likely to be self-employed (Bates, 1995; Burke, Fitzroy & Nolan, 2002; Schiller & Crewson, 1997). Of the respondents, 51.4% is female. To control for the steadily increase in self-employment rates from young to old, *in_age* is included as a control variable (Zissimopoulos & Karoly, 2007). The age is indicated in years and corresponds to the age of the individual at the end of the year in which the survey was taken. The average age of the sample equals 57.5 years old. To account for a non-linear relationship between age and entrepreneurship, *in_age2*, is added to the model, which describes the term *in_age* squared (Levesque & Minniti, 2006). Furthermore, *in_education* is added to the model, which indicates the level of education of the individual by denoting how many years of education the individual enjoyed. The variable is added to control for the findings that higher education increases the probability of becoming entrepreneur, and being successful as entrepreneur (Robinson & Sexton, 1994). On average, the individuals in the sample followed 13.0 years of education. Besides the educational level of the entrepreneur, the educational level of the parents is also added to the model, denoted by *in_motherseducation* and *in_fatherseducation*, the educational level of the mother and father respectively. They are included to control for the findings that technology entrepreneurs are most likely to come from a background where parents are less educated than they are (Wadhwa et al., 2009). It can also be expected that having parents with higher education increases the wealth of the household and the possibilities to better educate the entrepreneurial individual. The categorical variable *in_race* is added to the model, to control for the effect of race on being an entrepreneur. The ethnic and racial background of individuals exposes them to different cultural and psychological factors, influencing their risk-taking behaviour and their management skills (Bates, 1997; Hout & Rosen, 1999; Schiller & Crewson, 1997). Another important control variable is the industry in which the individual is currently employed, which is denoted by *in_industry*. For entrepreneurs, the entry barriers are different for different industry groups, making it more or less likely to be an entrepreneur in a certain industry group (Bates, 1995). Therefore, *in_industry* is added as a control variable. The industries that are represented in this study are agriculture, mining and construction, non-durable manufacturing, durable manufacturing, transportation, wholesale, retail, finance, business, personal service, entertainment,

professional service, and public administration. To account for the health of the individual and the possible effects on his ability to work, *in_health* is added to the model. The health of the individual is also tested as a mediator, and descriptive statistics can be found in section 3.1.5. Stephan & Roesler (2010) found that entrepreneurs in general exhibit better health on a number of measures. These included lower blood pressure, as well as higher well-being and more self-reported health indicators. They visit less a physician and also have less sick days. Changes in health can significantly influence being self-employed or not, and therefore, *in_health* is added as a control variable. The last control variable is *hh_cohabitants*, which represents the number of individuals who the individual of interest lives with. Living with more individuals is more costly, and requires more household wealth. Living with other cohabitants is also suggested to cause a degree of mutual obligations and trust (Sanders & Nee, 1996). This can influence the probability of being self-employed, and therefore the number of cohabitants is added as a control variable.

3.2 Entrepreneurial Exit

3.2.1 Data

For the analysis regarding the probability of an entrepreneurial exit, the same longitudinal data is used from the Health and Retirement Study (HRS). However, there are a few changes to the dataset that are different compared to the analysis of being entrepreneur. A new dependent variable *exit* is created that indicates whether someone exited entrepreneurship. Individuals who have never been working or have never been self-employed are removed from the sample, since they are unable to exit self-employment. Similar to the basic analysis, the data is reshaped. Individuals with an age below 51 as well as above 65 are left out of the sample. Furthermore, the individuals who are retired are left out of the sample, as well as the individuals with a negative total household wealth. After the adjustment, the sample consists of 58,294 observations and 10,839 variables.

3.2.2 Dependent Variable

exit is a dummy variable indicating whether an individual is self-employed. The variable equals 1 if an individual was self-employed in one wave and in the next wave indicated to be not self-employed. In table 6, the descriptive statistics of *exit* are depicted. It can be seen that of all the entrepreneurs, 22.8% exited entrepreneurship.

Table 6: Descriptive Statistics of the Dependent Variable *exit*

Variable	Number of Observations	Mean	Standard Deviation
exit [0/1]	9,583	0.228	0.419

3.2.3 Independent Variables

The independent variables are constructed similar to the basic analysis. In table 7, the descriptive statistics of the independent variables are depicted.

Table 7: Descriptive Statistics of the Independent Variables

Binary Independent Variables	Number of Observations	Mean	Standard Deviation
partner [0/1]	9,580	0.823	0.381
par_work [0/1]	7,670	0.724	0.447
par_unemployed [0/1]	5,701	0.026	0.160
par_selfemployed [0/1]	5,539	0.407	0.491
par_poorhealth [0/1]	4,712	0.060	0.238
par_depressed [0/1]	6,250	0.106	0.308

Out of all individuals, 82.3% is married or has a partner that is present. From all the individuals with a partner, 72.4% has a partner that is working, whilst the remaining part of the partners is not working. From all the partners, 2.6% is unemployed and 40.7% is self-employed. It can also be seen that 6.0% of the partners has poor health. Finally, 10.6% of the partners is said to be depressed. The descriptive statistics are very similar to the descriptive statistics depicted in table 2.

3.2.4 Descriptive Statistics and Correlations

In table 8, the descriptive statistics are given of the independent variables for the group of interest and the reference group.

Table 8: Descriptive Statistics of the Independent Variables for the group of interest and the reference group

	Exit			No Exit		
Independent Variable	**Observations**	**Mean**	**Std. Dev.**	**Observations**	**Mean**	**Std. Dev.**
partner [0/1]	2,179	0.798	0.402	7,401	0.831	0.375
par_work [0/1]	1,687	0.679	0.467	5,983	0.737	0.441
par_unemployed [0/1]	1,191	0.039	0.193	4,510	0.023	0.149
par_selfemployed [0/1]	1,144	0.364	0.481	4,395	0.419	0.493
par_poorhealth [0/1]	981	0.087	0.281	3,731	0.053	0.224
par_depressed [0/1]	1,385	0.108	0.310	4,865	0.105	0.307

The descriptive statistics confirm the expectations about the relationships between the partner characteristics and entrepreneurial exit. First of all, it can be seen that the incidence of having a partner is higher amongst the individuals who did not exit. It can also be seen that the incidence of a partner that works is higher amongst the individuals who did not exit. The incidence of unemployed partners is higher amongst individuals who exited, and the incidence of self-employed partners is higher amongst the group that did not exit. With regard to physical and mental health, it can be seen that the individuals who exited are more likely to have a partner with poor physical health, as well as poor mental health, being depressed. On average, individuals who did not exit entrepreneurship are more likely to have a partner, more likely to have a partner that works, less likely to have a partner that is unemployed, less likely to have a partner that has poor health, and less likely to have a partner that felt depressed, compared to the group of individuals who did exit entrepreneurship.

In table 9, the correlations are depicted between the dependent variable and the independent variables, as well as between the independent variables themselves.

Table 9: Pairwise Correlation Matrix

	exit	*partner*	*par_work*	*par_unemployed*	*par_selfemployed*	*par_poorhealth*	*par_depressed*
exit	1.000						
partner	-0.037	1.000					
par_work	-0.054	0.001	1.000				
par_unemployed	0.040	0.010	-1.000	1.000			
par_selfemployed	-0.048	0.019	-0.027	.	1.000		
par_poorhealth	0.057	-0.012	-0.309	0.072	0.032	1.000	
par_depressed	0.003	-0.005	-0.117	0.040	0.010	0.282	1.000

The correlation matrix confirms the expectations of the direction of the effects. It can be seen that having a partner, and having a partner that works are negatively associated with entrepreneurial exit. Having a partner that is self-employed, has poor health or that felt depressed is positively associated with entrepreneurial exit. However, the correlations between the independent variables and *exit* are not very strong. Based on the correlation matrix, it can be expected that the expected directions of the associations might be present, but also might not be significant. This suggest that there are other mechanisms that more dominantly determine entrepreneurial exit. The correlation between *par_unemployed* and *exit* is positive, contrary to what is expected. The correlation shows that having a partner that is unemployed is positively associated with an entrepreneurial exit, while hypothesis 6c states a negative association. The correlation signals that hypothesis 6c might have to be rejected.

3.2.5 Mediators

In this analysis, the same mediators are tested as in the main analysis. In table 10, the descriptive statistics of the mediators in this sample are depicted.

Table 10: Descriptive Statistics of the Mediators

Categorical Variable	**Number of Observations**	**Mean**	**Standard Deviation**
hh_wealthcat[3]	9,583	6.209	3.924
in_health[4]	9,581	2.309	1.014
Continuous Variable	**Number of observations**	**Mean**	**Standard Deviation**
in_hoursworked	9,327	39.943	19.811
Binary Variable	**Number of observations**	**Mean**	**Standard Deviation**
in_depressed [0/1]	7,804	0.094	0.292

Table 10 shows that the average category of wealth, out of 11 categories is 6.209 and the average health category is category 2.31, which is the category very good. It can be seen that in the sample, the average hours worked is 39.943 and 9.4% of the individuals felt depressed.

3.2.6 Controls

In the analysis regarding the probability of an entrepreneurial exit, it can be expected that there are different mechanisms compared to the mechanisms that determined the incidence of self-employment. Compared to the main analysis, there are therefore a few changes in the control variables. First of all, the education of both the parents are not included as control variables. The educational level of the parents can influence the educational level of the individual himself, and the level of support for starting a business and being in business. However, it is less likely to influence the decision to exit entrepreneurship. Contrary to the main analysis, a new control variable *in_firmsize* is added to control for the size of the firm of the individual. According to Wennberg et al. (2010), the effect of an entrepreneurial exit might diminish with firm size. As the firm, started by a single entrepreneur, grows over time, the impact of the entrepreneur might

[3] Descriptive Statistics of the categories of *hh_wealthcat* are available on request of the author

[4] Descriptive Statistics of the categories of *in_health* are available on request of the author

diminish. The success and size of the firm could therefore differently influence the decision to leave the firm. The variable indicating the size of the firm, *in_firmsize,* is a continuous variable indicating the size of the firm. The question that was asked is 'Including yourself, how many people work in this business?'. On average, the firms of the individuals in the sample have 221 employees. Of the self-employed, 60% has only 1 or 2 employees, contrary to a few individuals having a large firm with over 10,000 employees.

3.3 Methodology

For both the analysis of the probability of being an entrepreneur and the probability of an entrepreneurial exit, the same methods are performed. As to determine the effect of the partner determinants, pooled logit models are constructed, with the binary variables *in_selfemployed* or *exit* as the dependent variable and the variables of interest *partner, par_work, par_unemployed, par_selfemployed, par_poorhealth,* and *par_depressed* as independent variables. Depending on the analysis, a number of control variables are added to the model. The standard errors will be clustered on the individual level through a personal identification number, since the data consists of longitudinal data. Two models will be constructed for each variable of interest. The first model will be a basic model with only the dependent and independent variable. The model will give a first indication of the expected possible association. The results of the model can also be compared to the more detailed models, and a first robustness check can be performed. The second model will be the extended model with all the control variables included. These two models will be the starting point for each analysis. A positive and significant coefficient of the independent variables will indicate a positive association between the specific variable and the probability of being entrepreneur, ceteris paribus, and a negative and significant coefficient of the independent variables will indicate a negative association, ceteris paribus.

By estimating the pooled logit models, the general effect of the independent partner variable on being entrepreneurial is estimated. However, it is likely that the effect is not exclusively direct, but might also be indirect, through other variables. This is especially applicable in this analysis since the variables of interest relates to partner characteristics. It is likely that these partner characteristics affect the decision to be an entrepreneur indirectly, by affecting the individual or the household stability. After having estimated the general effect with the two models, the basic and extended model, a third model will be constructed. This model is a mediation model with

mediators included that possibly explain the relationship between the independent partner variable and the probability of being an entrepreneur or entrepreneurial exit. The mediators are chosen intuitively as well as based on literature. In order to test the mediation effect, several statistical tests are performed, as proposed by Kenny and Baron (1986). They introduced a path diagram as a model for depicting a causal chain. The model consists of a three-variable system, with two causal paths that contribute to the direct impact of the independent variable and the impact of the mediator. The first path is the path from the independent variable to the mediator. The dependent variable is also influenced by the mediator, which is the second path. The third path is the direct impact of the independent variable on the outcome variable, being self-employed or not or entrepreneurial exit or not. The paths are depicted in figure 1.

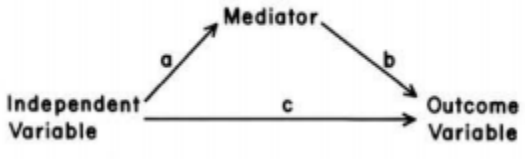

Figure 1: Basic Causal Chain Involved in Mediation (Baron & Kenny, 1986, p. 1176)

Based on the basic causal chain, Baron and Kenny (1986) identify four conditions for mediation. The first condition states that the independent variable should be a significant predictor of the individual being self-employed or not or the individual having exited or not. The second condition states that the independent partner variables should be significant predictors of the mediator. The third condition states that the mediator should be a significant predictor of the probability of being self-employed or the probability of an entrepreneurial exit. The fourth and final condition states that the coefficient of the independent variable should be reduced, or become insignificant after adding the mediator to the model. When the coefficient becomes insignificant, this indicates that there exists full mediation. A coefficient that is reduced but did not become insignificant indicates partly mediation. There are more mediators that operate within the relationship. The series of tests will be performed in order to find a possible mediating effect. However, with these tests, the indirect effect, which is the proportion of the relationship of interest that is mediated by the mediator, cannot be found (Hessels, Rietveld & Van der Zwan, 2017). The indirect effect can be found by using the khb-method, as proposed by Kohler, Karlson and Holm (2011), which decomposes the results into direct and indirect effects. When estimating the mediation model with

more mediators, the mediation models are presented with one of the mediators included as well as with both the mediators, in order to observe the significance of a single mediator. The standard errors are again clustered at the individual level. The results of the mediation model show the percentage of the found effect between the independent partner variables and the probability of being an entrepreneur or the probability of an entrepreneurial exit that is explained through the chosen mediators.

4. Results

4.1 Being an Entrepreneur

4.1.1 The Presence of a Partner

In table 11, the results are depicted in order to test the first hypothesis. The first model is a basic model without control variables. It can be seen that having a partner, compared to not having a partner, increases the probability of being self-employed, ceteris paribus. This result is significant at a 1% significance level in the basic model. In the second model, the extended model, a set of control variables is added, and the coefficient of *partner* remains positive and significant at a 1% significance level. Having found this relationship, hypothesis 1a cannot be rejected. For individuals aged 51-65, having a partner, compared to not having a partner, increases the probability of being self-employed, ceteris paribus. In the third model, the model is extended with the mediator indicating the total wealth of the household to obtain more detailed information about the relationship of interest. For the mediation effect to be significant, four conditions have to be satisfied. The first condition is fulfilled by having found support for hypothesis 1a. Additional statistical tests[5] show that having a partner significantly and positively predicts the category of total household wealth, satisfying condition 2. It is also found that the wealth of the household significantly and positively predicts the probability of being self-employed, which satisfies condition 3. Model 3 presented in table 11 consists of the extended model including the mediator. The coefficient of the variable *partner* is reduced and has become insignificant, indicating that there is full mediation. The four criteria are satisfied, supporting hypothesis 1b. For individuals aged 51-66, the total wealth of the household mediates the positive association between having a partner, compared to not having a partner, and the probability of being self-employed versus being paid-employed, ceteris paribus. Hypotheses 1a and 1b cannot be rejected.

[5] The results are available on request from the author

Table 11: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *partner* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
partner	0.356***	(0.063)	0.213***	(0.070)	-0.091	(0.072)
Mediating variables						
hh_wealthcat					0.184***	(0.008)
Control variables						
in_gender [1/2]			-0.620***	(0.066)	-0.675***	(0.067)
in_age [51-65]			-0.196**	(0.094)	-0.224**	(0.099)
in_age2			0.002**	(0.001)	0.002**	(0.001)
in_education			0.097***	(0.013)	0.040***	(0.013)
in_motherseducation			0.023**	(0.011)	0.013	(0.011)
in_fatherseducation			0.011	(0.010)	-0.001	(0.010)
in_race						
2. black/African			-0.421***	(0.097)	-0.181*	(0.099)
3. other			-0.127	(0.149)	-0.123	(0.152)
hh_cohabitants			-0.034	(0.022)	-0.010	(0.022)
in_health						
2. very good			-0.230***	(0.052)	-0.173***	(0.053)
3. good			-0.355***	(0.061)	-0.215***	(0.063)
4. fair			-0.223***	(0.079)	-0.023	(0.080)
5. poor			0.109	(0.137)	0.360***	(0.138)
in_industry[6]			Yes		Yes	
Indirect effects						
Via hh_wealthcat					0.301*** (143.48%)	(0.015)
Intercept	-1.671***	(0.058)	4.471	(2.754)	5.787**	(2.886)
Observations	39,221		39,221		39,221	
Pseudo R^2	0.003		0.170		0.217	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

4.1.2 The Employment of the Partner

In table 12, it can be seen that the coefficient of *par_work* in the basic model is positive and significant at a 1% significance level, indicating that having a partner with paid work, compared to having a partner that does not have paid work, increases the probability of being self-employed, ceteris paribus. In the extended model with the set of control variables added to the basic model,

[6] Coefficients of the dummies are available on request from the author

it can be seen that the coefficient of *par_work* remains positive and significant at a 1% significance level. It can be concluded that for individuals aged 51-65, having a partner with paid work, compared to having a partner that does not have paid work, increases the probability of being self-employed, ceteris paribus. Hypothesis 2a cannot be rejected.

Table 12: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *par_work* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_work	0.204***	(0.051)	0.235***	(0.057)	0.229***	(0.058)
Mediating variables						
hh_wealthcat					0.181***	(0.009)
Control variables						
in_gender [1/2]			-0.578***	(0.072)	-0.652***	(0.074)
in_age [51-65]			-0.261**	(0.107)	-0.307***	(0.112)
in_age2			0.003***	(0.001)	0.003***	(0.001)
in_education			0.086***	(0.015)	0.027*	(0.014)
in_motherseducation			0.035***	(0.013)	0.028**	(0.013)
in_fatherseducation			-0.006	(0.011)	-0.020*	(0.011)
in_race						
2. black/African			-0.401***	(0.118)	-0.160	(0.121)
3. other			-0.261	(0.165)	-0.265	(0.171)
hh_cohabitants			-0.023	(0.025)	0.002	(0.025)
in_health						
2. very good			-0.228***	(0.057)	-0.170***	(0.058)
3. good			-0.367***	(0.068)	-0.224***	(0.070)
4. fair			-0.169*	(0.088)	0.023	(0.090)
5. poor			0.131	(0.155)	0.396**	(0.158)
in_industry[7]			Yes		Yes	
Indirect effects						
Via hh_wealthcat					0.027***	(0.008)
					(10.46%)	
Intercept	-1.459***	(0.046)	6.466**	(3.113)	8.047**	(3.263)
Observations	30,063		30,063		30,063	
Pseudo R^2	0.001		0.163		0.210	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[7] Coefficients of the dummies are available on request from the author

In order to test hypothesis 2b, several statistical tests are performed. The first condition is confirmed by hypothesis 2a, having a partner that works significantly predicts the probability of being self-employed. Additional statistical tests[8] show that conditions 2 and 3 are also fulfilled. Having a partner that works significantly increases the total wealth of the household, ceteris paribus, and having a higher total household wealth significantly increases the probability of being self-employed, ceteris paribus. The full model, including the mediator, is presented as model 3 in table 12. The coefficient of *par_work* remains significant but is reduced, indicating that there is partly mediation. Using the khb-method, the indirect effects are found. In the relationship between having a partner that works and the probability of being self-employed, 10.46% is mediated by the total wealth of the household. Hypothesis 2b cannot be rejected.

In table 13, the results are depicted of the models testing hypothesis 2c and 2d. In the basic model, the coefficient of *par_unemployed* is negative and significant at a 1% significance level, indicating that having a partner that is unemployed, compared to having a partner that is not unemployed, decreases the probability of being self-employed, ceteris paribus. In the extended model, the coefficient of *par_unemployed* remains negative and significant at a 1% significance level. It can be concluded that having a partner that is unemployed, compared to having a partner that is not unemployed, decreases the probability of being self-employed. Hypothesis 2c cannot be rejected. For a mediating effect to be present, the four conditions need to be fulfilled. The first condition is confirmed by hypothesis 2c, having a partner that is unemployed significantly predicts the probability of being self-employed. Statistical tests[9] show that having a partner that is unemployed, significantly and negatively predicts the total wealth of the household, ceteris paribus. It is also found that having a higher total wealth increases the probability of being self-employed, ceteris

paribus. Condition 2 and 3 are also satisfied. Model 3 in table 13 presents the full mediation model. The coefficient of *par_unemployed* remains significant but is reduced, indicating that there is partly mediation. The mediator *hh_wealthcat* mediates the negative association for 27.01%. Having a partner that is unemployed decreases the total wealth of the household, and this in turn decreases the probability of being entrepreneur. Hypothesis 2d cannot be rejected.

[8] The results are available on request from the author
[9] The results are available on request from the author

Table 13: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *par_unemployed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_unemployed	-0.518***	(0.125)	-0.484***	(0.131)	-0.365***	(0.137)
Mediating variables						
hh_wealthcat					-0.184***	(0.010)
Control variables						
in_gender [1/2]			-0.501***	(0.080)	-0.607***	(0.082)
in_age [51-65]			-0.358***	(0.127)	-0.422***	(0.134)
in_age2			0.003***	(0.001)	0.004***	(0.001)
in_education			0.078***	(0.017)	0.022	(0.016)
in_motherseducation			0.038**	(0.015)	0.030**	(0.015)
in_fatherseducation			-0.002	(0.012)	-0.016	(0.012)
in_race						
2. black/African			-0.394***	(0.136)	-0.135	(0.139)
3. other			-0.154	(0.184)	-0.152	(0.191)
hh_cohabitants			-0.046	(0.023)	-0.019	(0.029)
in_health						
2. very good			-0.211***	(0.064)	-0.167**	(0.066)
3. good			-0.373***	(0.077)	-0.242***	(0.080)
4. fair			-0.106	(0.099)	0.043	(0.102)
5. poor			0.235	(0.175)	0.497***	(0.181)
in_industry[10]			Yes		Yes	
Indirect effects						
Via hh_wealthcat					-0.135*** (27.01%)	(0.025)
Intercept	-1.255***	(0.321)	9.381**	(3.703)	11,544***	(3.897)
Observations	21,563		21,563		21,563	
Pseudo R^2	0.001		0.166		0.214	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

In table 14, the results are presented from the models with *in_selfemployed* as the dependent variable and *par_selfemployed* as the independent variable. In both the basic model and the extended model, the coefficient of *par_selfemployed* is significant and positive, indicating that having a partner that is self-employed, compared to having a partner that is not self-employed, significantly increases the probability of being self-employed, ceteris paribus. Hypothesis 2e cannot be rejected, and therefore condition 1 for the mediating effect to be present is fulfilled.

[10] Coefficients of the dummies are available on request from the author

Statistical tests[11] show that conditions 2 and 3 are also satisfied. The fourth condition is also satisfied, and this can be seen in model 3 of table 14. The coefficient of *par_selfemployed* remains significant but is reduced, indicating that there is partly mediation. The indirect effects show that the relationship between having a partner that is self-employed and the probability that the individual is self-employed is mediated by the total wealth of the household for 18.77%.

Hypothesis 2f cannot be rejected.

Table 14: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *par_selfemployed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_selfemployed	1.331***	(0.065)	1.442***	(0.075)	1.213***	(0.076)
Mediating variables						
hh_wealthcat					0.154***	(0.010)
Control variables						
in_gender [1/2]			-0.750***	(0.082)	-0.813***	(0.085)
in_age [51-65]			-0.380***	(0.135)	-0.432***	(0.140)
in_age2			0.004***	(0.001)	0.004***	(0.001)
in_education			0.080***	(0.017)	0.033**	(0.017)
in_motherseducation			0.035**	(0.015)	0.030**	(0.015)
in_fatherseducation			-0.009	(0.013)	-0.020	(0.013)
in_race						
2. black/African			-0.310**	(0.138)	-0.106	(0.140)
3. other			-0.196	(0.197)	-0.178	(0.200)
hh_cohabitants			-0.032	(0.030)	-0.011	(0.030)
in_health						
2. very good			-0.173**	(0.067)	-0.147**	(0.069)
3. good			-0.315***	(0.081)	-0.216***	(0.083)
4. fair			-0.081	(0.103)	0.031	(0.104)
5. poor			0.348	(0.179)	0.554***	(0.183)
in_industry[12]			Yes		Yes	
Indirect effects						
Via hh_wealthcat					0.280*** (18.77%)	(0.020)
Intercept	-1.632***	(0.040)	10.163**	3.923	11.893***	(4.065)
Observations	20,876		20,876		20,876	
Pseudo R^2	0.059		0.218		0.249	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[11] The results are available on request from the author

[12] Coefficients of the dummies are available on request from the author

4.1.3 The Physical Health of the Partner

In table 15, the results of the pooled logit regression are depicted with the independent variable indicating whether the partner has poor health and the dependent variable indicating whether the individual is self-employed or not. The coefficient of *par_poorhealth* is negative and significant at a 1% significance level in the basic model. In the extended model, the coefficient of *par_poorhealth* is still negative and significant at a 5% significance level. These results indicate that having a partner with poor health, compared to having a partner with very good or excellent health decreases the probability of being self-employed, ceteris paribus. Hypothesis 3a cannot be rejected.

Table 15: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *par_poorhealth* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**	
Independent variable				
par_poorhealth	-0.413***	(0.114)	-0.266**	(0.132)
Control variables				
in_gender [1/2]			-0.663***	(0.087)
in_age [51-65]			-0.242*	(0.143)
in_age2			0.002*	(0.001)
in_education			0.067***	(0.018)
in_motherseducation			0.043***	(0.015)
in_fatherseducation			-0.005	(0.013)
in_race				
2. black/African American			-0.497***	(0.154)
3. other			-0.169	(0.207)
hh_cohabitants			-0.045	(0.032)
in_health				
2. very good			-0.209***	(0.066)
3. good			-0.361***	(0.083)
4. fair			-0.261**	(0.111)
5. poor			-0.117	(0.219)
in_industry[13]			Yes	
Intercept	-1.215***	(0.035)	6.698	(4.176)
Observations	17,260		17,260	
Pseudo R^2	0.002		0.168	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

[13] Coefficients of the dummies are available on request from the author

In table 15(continued), three mediation models are presented. The first model is the pooled logit model equal to the extended model, including the mediator *in_health*, indicating the health of the individual. The control variable *in_health* is excluded from this model. With the support for hypothesis 3a, condition 1 is satisfied. Having a partner with poor health significantly predicts the probability of being self-employed. The first mediator that is presented is the health of the entrepreneurial individual. Statistical tests[14] show that the poor health of the partner significantly predicts the health of the entrepreneurial individual, ceteris paribus. Condition 2 is satisfied. However, it is also found that the own health of the individual does not significantly predict his probability of being self-employed. Condition 3 is not satisfied. Even though condition 4 is satisfied, the coefficient of *par_poorhealth* is reduced, there is no mediation by the own health of the individual, since the third condition is not satisfied. Hypothesis 3b is rejected.

The second mediator that is tested is the hours worked by the individual. Again, condition 1 is satisfied. Statistical tests show that condition 2 is not satisfied. Having a partner with poor health does not significantly predict the hours worked by the entrepreneurial individual. Condition 3 is also not satisfied, since the hours worked by the individual does not significantly predict the probability of being self-employed. There is no mediation by the hours worked. Hypothesis 3c is also rejected.

[14] The results are available on request from the author

Table 15(continued): Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *par_poorhealth* as independent variable.

	Model 3: Extended Model + Mediator		**Model 4: Extended Model + Mediator**		**Model 5: Extended Model including both mediators**	
Independent variable						
par_poorhealth	-0.238*	(0.130)	-0.266**	(0.132)	-0.238*	(0.130)
Mediating variables						
in_health	-0.117***	(0.033)			-0.117***	(0.014)
in_hoursworked			0.0005	(0.003)	0.0005	(0.003)
Control variables						
in_gender [1/2]	-0.662***	(0.087)	-0.658***	(0.087)	-0.658***	(0.087)
in_age [51-65]	-0.245*	(0.143)	-0.245*	(0.144)	-0.248*	(0.144)
in_age2	0.002**	(0.001)	0.002*	(0.001)	0.002**	(0.001)
in_education	0.066***	(0.018)	0.067***	(0.018)	0.066***	(0.018)
in_motherseducation	0.043***	(0.015)	0.043***	(0.015)	0.043***	(0.015)
in_fatherseducation	-0.006	(0.013)	-0.005	(0.013)	-0.006	(0.013)
in_race						
2. black/African American	-0.497***	(0.153)	-0.497***	(0.154)	-0.496***	(0.153)
3. other	-0.159	(0.208)	-0.169	(0.208)	-0.159	(0.208)
hh_cohabitants	-0.045	(0.032)	-0.046	(0.032)	-0.045	(0.032)
in_health						
2. very good			-0.209***	(0.066)		
3. good			-0.361***	(0.083)		
4. fair			-0.261**	(0.111)		
5. poor			-0.116	(0.219)		
in_industry[15]	Yes		Yes		Yes	
Indirect effects						
Via in_health	-0.049*** (17.07%)	(0.014)			-0.049** (17.06%)	(0.014)
Via in_hoursworked			0.0002 (-0.06%)	(0.001)	0.0001 (-0.04%)	(0.001)
Intercept	6.887*	(4.178)	6.751	(4.186)	6.935*	(4.188)
Observations	17,260		17,260		17,260	
Pseudo R^2	0.167		0.168		0.167	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

[15] Coefficients of the dummies are available on request from the author

4.1.4 The Mental Health of the Partner

In table 16, the results are depicted of the model with the variable *par_depressed* as independent variable and *in_selfemployed* as the dependent variable. In both the basic and the extended model, the coefficient of *par_depressed* is not significant, indicating that having a partner that felt depressed does not significantly predict the probability of being self-employed. Hypothesis 4a is not supported and is rejected.

Table 16: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *par_depressed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_depressed	-0.037	(0.072)	0.015	(0.076)	0.011	(0.076)
Mediating variables						
in_depressed					0.072	(0.083)
Control variables						
in_gender [1/2]			-0.548***	(0.083)	-0.550***	(0.083)
in_age [51-65]			-0.185	(0.133)	-0.186	(0.133)
in_age2			0.002*	(0.001)	0.002*	(0.001)
in_education			0.095***	(0.017)	0.096***	(0.017)
in_motherseducation			0.019	(0.014)	0.019	(0.014)
in_fatherseducation			-0.009	(0.012)	-0.009	(0.012)
in_race						
2. black/African American			-0.373***	(0.133)	-0.376***	(0.133)
3. other			-0.291	(0.198)	-0.292	(0.198)
hh_cohabitants			-0.010	(0.030)	0.010	(0.030)
in_health						
2. very good			-0.280***	(0.067)	-0.280***	(0.067)
3. good			-0.447***	(0.081)	-0.451***	(0.081)
4. fair			-0.223**	(0.102)	-0.232**	(0.102)
5. poor			0.071	(0.200)	0.054	(0.200)
in_industry[16]			Yes		Yes	
Indirect Effects						
Via in_depressed					0.004	(0.005)
					(45.22%)	
Intercept	-1.344***	(0.033)	4.261	(3.895)	4.290	(3.895)
Observations	21,584		21,584		21,584	
Pseudo R^2	0.000		0.160			

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

[16] Coefficients of the dummies are available on request from the author

In table 16, the mediation model is presented. The coefficient of *par_depressed* remains insignificant, conform the findings with regard to hypothesis 4a. Condition 1 is violated and therefore there is no mediation effect. Furthermore, the mediator has a coefficients that is not significant. Hypotheses 4b has to be rejected.

In appendix A, additional analyses are presented with more detailed information into the relationship between the mental health of the partner and own mental health and the probability of being entrepreneur. It can be seen that having a partner that felt depressed, increases the probability of the individual becoming depressed, ceteris paribus. This effect is significant at a 1% significance level. The mental health of a partner affects the individual by negatively influencing the mental health of the individual. However, being depressed does not negatively influence the probability of being entrepreneur. Therefore, there is an effect of having a partner with poor mental health, but this does not significantly affect the probability of becoming entrepreneur.

4.2 Entrepreneurial Exit

4.2.1 The Presence of a Partner

In table 17, the results are depicted in order to test the effect of having a partner. It can be seen that in the basic model the coefficient of *partner* is negative and significant at a 5% significance level. However, in the extended model the coefficient has become insignificant, indicating that the presence of a partner does not significantly predict the probability of an entrepreneurial exit. Hypothesis 5a has to be rejected.

Since there does not exist a significant relationship between the presence of a partner and the probability of an entrepreneurial exit, condition 1 for mediation is not satisfied. Statistical tests[17] show that condition 2 is satisfied, having a partner positively predicts the total wealth of the household, ceteris paribus. Condition 3 is also satisfied, since the total wealth of the household negatively predicts the probability of an entrepreneurial exit. Condition 4 is not satisfied, since after adding the mediator to the model, the coefficient of *partner* increased. Condition 1 and 4 are not satisfied and therefore there does not exist a mediating effect. Hypothesis 5b has to be rejected.

[17] Results are available on request of the author

Table 17: Pooled Logit Regression Results with *exit* as dependent variable and *partner* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
partner	-0.185**	(0.082)	-0.074	(0.090)	0.035	(0.092)
Mediating variables						
hh_wealthcat					-0.077***	(0.009)
Control variables						
in_gender [1/2]			0.487***	(0.074)	0.486***	(0.075)
in_age [51-65]			-0.294	(0.209)	-0.284	(0.209)
in_age2			0.003	(0.002)	0.003	(0.002)
in_education			-0.053***	(0.012)	-0.030**	(0.013)
in_firmsize			2.89e-06	(3.16e-06)	3.50e-06	(3.26e-06)
in_race						
2. black/African			0.465***	(0.118)	0.329***	(0.117)
3. other			0.054	(0.152)	-0.004	(0.146)
hh_cohabitants			0.040	(0.028)	0.029	(0.027)
in_health						
2. very good			0.068	(0.083)	0.049	(0.083)
3. good			0.274***	(0.090)	0.219**	(0.090)
4. fair			0.630**	(0.107)	0.540***	(0.107)
5. poor			0.589***	(0.209)	0.499**	(0.207)
in_industry[18]			Yes		Yes	
Indirect effects						
hh_wealthcat					-0.103***	(0.015)
					(151.29%)	
Intercept	-1.185***	(0.074)	5.507	(6.077)	5.292	(6.094)
Observations	7,461		7,461		7,461	
Pseudo R^2	0.001		0.033		0.044	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

4.2.2 The Employment of the Partner

In table 18, the results are depicted in order to test hypothesis 6a and 6b. It can be seen that in the basic model and the extended model, the coefficient of *par_work* is negative and significant. For individuals aged 51-65, having a partner that works, compared to having a partner that does not

[18] Coefficients of the dummies are available on request of the author

work, decreases the probability of an entrepreneurial exit, ceteris paribus. Hypothesis 6a cannot be rejected.

Table 18: Pooled Logit Regression Results with *exit* as dependent variable and *par_work* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_work	-0.221***	(0.076)	-0.142*	(0.080)	-0.117	(0.081)
Mediating variables						
hh_wealthcat					-0.083**	(0.010)
Control variables						
in_gender [1/2]			0.558***	(0.083)	0.563***	(0.083)
in_age [51-65]			-0.298	(0.232)	-0.290	(0.233)
in_age2			0.003	(0.002)	0.003	(0.002)
in_education			-0.043***	(0.014)	-0.018	(0.014)
in_firmsize			-1.43e-06	(3.36e-06)	-1.01e-06	(3.49e-06)
in_race						
2. black/African			0.496***	(0.142)	0.347**	(0.142)
3. other			0.031	(0.178)	-0.032	(0.171)
hh_cohabitants			0.025	(0.032	0.012	(0.031)
in_health						
2. very good			0.025	(0.091)	0.009	(0.092)
3. good			0.264***	(0.099)	0.206**	(0.099)
4. fair			0.621***	(0.119)	0.542***	(0.119)
5. poor			0.574**	(0.234)	0.476**	(0.231)
in_industry[19]			Yes		Yes	
Indirect effects						
hh_wealthcat					-0.020**	(0.009)
					(14.33%)	
Intercept	-1.210***	(0.063)	5.415	(6.755)	5.307	(6.784)
Observations	6,067		6,067		6,067	
Pseudo R^2	0.002		0.035		0.047	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

The third model of table 18 consists of the model including the mediator. The first condition for mediation is satisfied by finding that *par_work* significantly predicts the probability of an entrepreneurial exit. Statistical tests[20] show that having a partner that works does not significantly influence the total wealth of the household. This results is interesting, since the expectation would

[19] Coefficients of the dummies are available on request from the author
[20] Results are available on request of the author

be that due to stable income of the partner the total wealth of the household would increase, enabling the entrepreneur to continue with his business. The results contradict this idea, and condition 2 is not satisfied. Condition 3 is satisfied, since the total household wealth is a significant predictor of the probability of an entrepreneurial exit. Condition 4 is not satisfied, since the coefficient of *par_work* has increased instead after having added the mediator to the model. It can be concluded that there is no mediating effect, and hypothesis 6b has to be rejected.

In table 19, models are presented with *exit* as dependent variable and *par_unemployed* as the independent variable in order to test hypotheses 6c and 6d. The coefficient of *par_unemployed* is in both the basic and extended model positive but insignificant. This indicates that the unemployment of a partner does not significantly predict the probability of an entrepreneurial exit, as was already expected based on the correlation matrix. Hypothesis 6c has to be rejected. With the rejection of hypothesis 6c, condition 1 for mediation is not satisfied, and therefore, there will be no mediating effect of the total wealth of the household. Condition 2 is also not satisfied. Statistical tests[21] show that an unemployed partner does not significantly predict the total wealth of the household. Again, condition 3 is satisfied, since the total wealth of the household significantly predicts the probability of an entrepreneurial exit. Condition 4 is also satisfied, since the coefficient of *par_unemployed* is reduced after having added the mediator. Since condition 1 and 2 are not satisfied, there is no mediating effect and therefore, hypothesis 6d has to be rejected.

[21] Results are available on request of the author

Table 19: Pooled Logit Regression Results with *exit* as dependent variable and *par_unemployed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_unemployed	0.379	(0.245)	0.280	(0.258)	0.170	(0.254)
Mediating variables						
hh_wealthcat					-0.089***	(0.012)
Control variables						
in_gender [1/2]			0.586***	(0.094)	0.608***	(0.095)
in_age [51-65]			0.057	(0.234)	0.098	(0.286)
in_age2			-0.0001	(0.002)	-0.0004	(0.002)
in_education			-0.056***	(0.017)	-0.030*	(0.017)
in_firmsize			-0.0001	(0.0002)	-0.0001	(0.0002)
in_race						
2. black/African			0.498***	(0.169)	0.327*	(0.169)
3. other			-0.014	(0.212)	-0.082	(0.205)
hh_cohabitants			0.011	(0.037)	0.004	(0.037)
in_health						
2. very good			0.098	(0.107)	0.095	(0.108)
3. good			0.394***	(0.118)	0.341***	(0.119)
4. fair			0.666***	(0.145)	0.592***	(0.144)
5. poor			1.023***	(0.261)	0.929***	(0.255)
in_industry[22]			Yes		Yes	
Indirect effects						
hh_wealthcat					0.103*** (37.91%)	(0.036)
Intercept	-1.431***	(0.042)	-5.084	(8.257)	-6.166	(8.303)
Observations	4,489		4,489		4,489	
Pseudo R^2	0.001		0.043		0.057	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

The last type of employment of the partner that is studied is whether the partner is self-employed or not. The results of this analysis are depicted in table 20. In both the basic and extended model, the coefficient of *par_selfemployed* is negative and significant, indicating that for individuals aged 51-65, having a partner that is self-employed, compared to having a partner that is not self-employed, decreases the probability of an entrepreneurial exit. Hypothesis 6e cannot be rejected. When hypothesis 6e cannot be rejected, this is support for condition 1 for mediation to be present.

[22] Coefficients of the dummies are available on request from the author

Condition 2 is also satisfied. Statistical tests[23] show that having a partner that is self-employed significantly and positively predicts the total wealth of the household. Condition 3 is also satisfied, since the total wealth of the household significantly predicts the probability of an entrepreneurial exit. After adding the mediator, the coefficient of *par_selfemployed* has become insignificant. Condition 4 is satisfied, and it can be stated that there is full mediation by the total wealth of the household. Hypothesis 6f cannot be rejected.

Table 20: Pooled Logit Regression Results with *exit* as dependent variable and *par_selfemployed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_selfemployed	-0.174**	(0.083)	-0.247***	(0.090)	-0.109	(0.092)
Mediating variables						
hh_wealthcat					-0.084***	(0.013)
Control variables						
in_gender [1/2]			0.646***	(0.098)	0.637***	(0.099)
in_age [51-65]			0.082	(0.288)	0.116	(0.290)
in_age2			-0.0003	(0.002)	-0.001	(0.002)
in_education			-0.054***	(0.017)	-0.029*	(0.017)
in_firmsize			-0.0001	(0.0002)	-0.0001	(0.0001)
in_race						
2. black/African			0.455***	(0.169)	0.305*	(0.171)
3. other			-0.037	(0.216)	-0.099	(0.210)
hh_cohabitants			0.009	(0.037)	0.003	(0.037)
in_health						
2. very good			0.084	(0.108)	0.077	(0.109)
3. good			0.394***	(0.119)	0.343***	(0.120)
4. fair			0.693***	(0.146)	0.618***	(0.144)
5. poor			0.964***	(0.263)	0.886***	(0.258)
in_industry[24]			Yes		Yes	
Indirect effects						
hh_wealthcat					-0.131*** (54.47%)	(0.022)
Intercept	-1.357***	(0.055)	-5.864	(8.374)		
Observations	4,393		4,393		4,393	
Pseudo R^2	0.001		0.046		0.057	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[23] Results are available on request of the author
[24] Coefficients of the dummies are available on request from the author

4.2.3 The Physical Health of the Partner

In table 21, the models are presented testing the influence of the health of the partner on the probability of an entrepreneurial exit. In the first model, the coefficient of *par_poorhealth* is positive and significant, indicating that having a partner in poor health increases the probability of an entrepreneurial exit, ceteris paribus. However, in the extended model, the coefficient becomes insignificant, indicating that there is no significant relationship between the health of the partner and the probability of an entrepreneurial exit. Hypothesis 7a has to be rejected.

Table 21: Pooled Logit Regression Results with *exit* as dependent variable and *par_poorhealth* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**	
Independent variable				
par_poorhealth	0.509***	(0.168)	0.082	(0.179)
Control variables				
in_gender [1/2]			0.542***	(0.106)
in_age [51-65]			-0.125	(0.305)
in_age2			0.001	(0.003)
in_education			-0.045**	(0.020)
in_firmsize			-0.00003	(0.00003)
in_race				
2. black/African American			0.921***	(0.201)
3. other			-0.032	(0.259)
hh_cohabitants			0.022	(0.045)
in_health				
2. very good			0.016	(0.111)
3. good			0.362***	(0.124)
4. fair			0.514***	(0.168)
5. poor			0.238	(0.408)
in_industry[25]			Yes	
Intercept	-1.477***	(0.048)	0.226	(8.879)
Observations	3,704		3,704	
Pseudo R^2	0.003		0.038	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

With the rejection of hypothesis 3a, there is no significant relationship and condition 1 for mediation to be present is not satisfied. Statistical tests[26] show that condition 2 however is satisfied. Having a partner with poor health increases the probability of the entrepreneurial individual having

[25] Coefficients of the dummies are available on request from the author
[26] Results are available on request of the author

poor health, ceteris paribus. Condition 3 is also satisfied. For an individual with poor health significantly increases the probability of an entrepreneurial exit, ceteris paribus. Condition 4 is also satisfied, since the coefficient of *par_poorhealth* is reduced in the full mediation model. However, due to condition 1 not being satisfied, there is no mediation by the individual health, and therefore hypothesis 7b is rejected. The results are presented in table 21(continued).

Table 21 (continued): Pooled Logit Regression Results with *exit* as dependent variable and *par_poorhealth* as independent variable.

	Model 3: Extended Model + Mediator		**Model 4 Extended Model + Mediator**		**Model 5: Extended Model Including Both Mediators**	
Independent variable						
par_poorhealth	0.081	(0.183)	0.035	(0.178)	0.031	(0.182)
Mediating variables						
in_health	0.167***	(0.047)			0.163***	(0.047)
in_hoursworked			-0.022***	(0.003)	-0.022***	(0.003)
Control variables						
in_gender [1/2]	0.540***	(0.106)	0.242**	(0.113)	0.238**	(0.113)
in_age [51-65]	-0.115	(0.305)	-0.028	(0.309)	-0.024	(0.308)
in_age2	0.001	(0.003)	0.0005	(0.003)	0.00004	(0.003)
in_education	-0.046**	(0.020)	-0.049**	(0.020)	-0.049**	(0.020)
in_firmsize	-0.00003	(0.00003)	-0.00004	(0.00004)	-0.00003	(0.00004)
in_race						
2. black/African American	0.908***	(0.204)	0.860***	(0.201)	0.847***	(0.204)
3. other	-0.042	(0.252)	-0.031	(0.261)	-0.042	(0.254)
hh_cohabitants	0.027	(0.045)	0.050	(0.045)	0.054	(0.045)
in_health						
2. very good			0.016	(0.113)		
3. good			0.376***	(0.126)		
4. fair			0.480***	(0.172)		
5. poor			0.225	(0.396)		
in_industry[27]	Yes		Yes			
Indirect Effects						
Via in_health	0.056***	(0.020)			0.056***	(0.020)
	(41.50%)				(35.69%)	
Via in_hoursworked			0.065**	(0.032)	0.070***	(0.031)
			(62.08%)		(44.72%)	
Intercept	-0.244	(8.858)	-0.840	(0.942)	-1.143	(8.946)
Observations	3,704		3,704		3,704	
Pseudo R^2	0.037		0.061		0.060	

*** *p*-value≤0.01, ** *p*-value≤0.05, * *p*-value≤0.1 (two-sided). Standard errors are between parentheses.

[27] Coefficients of the dummies are available on request from the author

Model 4 presents the model with the mediator *in_hoursworked* included. Statistical tests[28] show that condition 2 is satisfied, having a partner with poor health significantly decreases the hours worked by the individual, ceteris paribus. Condition 3 is also satisfied, since working more hours significantly reduces the probability of an entrepreneurial exit, ceteris paribus. In model 4, it can be seen that condition 4 is also satisfied, since the coefficient of *par_poorhealth* is reduced. However, due to condition 1 not being satisfied, there is no mediating effect and hypothesis 7c has to be rejected.

4.2.4 The Mental Health of the Partner

In table 22, the results are presented in order to test hypotheses 8a and 8b. In the first model, the coefficient of *par_depressed* is negative and insignificant. However, in the extended model, the coefficient becomes significant at a 10% significance level. Having a partner that felt depressed, decreases the probability of an entrepreneurial exit, ceteris paribus. This finding contradicts the expectation and hypothesis 8a has to be rejected. Condition 1 for mediation to be present is satisfied, since the mental health of the partner significantly predicts the probability of an entrepreneurial exit. Statistical tests[29] show that condition 2 is satisfied, since having a partner that felt depressed significantly predicts whether the individual felt depressed or not. However, condition 3 is not satisfied, since the individual being depressed does not significantly predict the probability of an entrepreneurial exit. This contradicts the findings of Hessels, Rietveld and Van der Zwan (2017), but can possibly be explained by the groups of interest being differently. Condition 4 is satisfied, since the coefficient is reduced. Due to condition 3 not being satisfied, there is no mediation by the health of the entrepreneurial individual and hypothesis 8b has to be rejected.

[28] Results are available on request of the author
[29] Results are available on request of the author

Table 22: Pooled Logit Regression Results with *exit* as dependent variable and *par_depressed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
par_depressed	-0.078	(0.136)	-0.244*	(0.136)	-0.259	(0.136)
Mediating variables						
in_depressed					0.177	(0.146)
Control variables						
in_gender [1/2]			0.459***	(0.101)	0.454***	(0.102)
in_age [51-65]			-0.493*	(0.293)	-0.491*	(0.293)
in_age2			0.005*	(0.003)	0.005*	(0.003)
in_education			-0.059***	(0.017)	-0.059***	(0.017)
in_firmsize			-6.92e-07	3.12e-06	-6.42e-07	3.12e-06
in_race						
2. black/African			0.413**	(0.179)	0.407**	(0.179)
3. other			-0.134	(0.219)	-0.143	(0.219)
hh_cohabitants			0.060	(0.037)	0.058	(0.037)
in_health						
2. very good			-0.146	(0.107)	-0.147	(0.107)
3. good			0.173	(0.117)	0.163	(0.117)
4. fair			0.564***	(0.145)	0.544	(0.146)
5. poor			0.439	(0.308)	0.400	(0.309)
in_industry[30]			Yes		Yes	
Indirect effects						
in_depressed					0.014 (-5.52%)	(0.012)
Intercept	-1.348***	(0.045)	11.003	(8.569)	10.924	8.584
Observations	4,153		4,153		4,153	
Pseudo R^2	0.0001		0.037		0.037	

*** *p*-value≤0.01, ** *p*-value≤0.05, * *p*-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

[30] Coefficients of the dummies are available on request from the author

5. Interaction Effects

In order to obtain more detailed information about the consistency of the models, interaction terms are added to the models. In these models, it is tested whether there is interaction between the independent variable of interest and the other independent variables (Ai & Norton, 2003). When the interaction term is significant, the effect of the independent variable on the dependent variable differs when the values of the other independent variables are different. Then, the result is not fully consistent. For each model, the consistency of the model will be discussed, and the results of the models are available on request of the author.

5.1 Being an Entrepreneur

When adding interaction terms to the first model, capturing the effect of the presence of a partner and the probability of being entrepreneur, it is found that there exists interaction with gender, education, the education of the father and some industry categories, showing that the results are not completely consistent. First of all, the positive relationship between having a partner and the probability of being entrepreneur differs for males and females. This can possibly be explained by traditional views on family life. Another interesting interaction is with education, where the positive effect of having a partner and the probability of being self-employed differs for individuals with a different number of years of education. A possible explanation could be that someone with a high level of education is, as an entrepreneur, active in a different type of industry than someone with a lower level of education. The businesses can differ in how demanding they are, and how uncertain the industry is. Therefore, the presence of a partner might have a different influence on individuals with different levels of education. There exists also interaction with the level of education of the father of the individual. Even though this seems unrelated to the effect of the partner, Wadhwa et al. (2009) found that technology entrepreneurs are most likely to come from a background where parents are less educated than the individual. The education of the parents could lead to a selection into an industry type, and in those different industries, the effect of the partner can expected to be different. This could also explain the interaction with some industry categories. There are differences in uncertainty of having a business in one industry category compared to another industry category, making the influence of the partner less or more important. For all other variables, there exists no interaction. It can be concluded that the results of the model testing the

first relationship are not fully consistent, but the interaction effects can be explained and point towards a direction for future research.

The positive relationship between having a partner that works and the probability of being an entrepreneur is also not fully consistent, since there exists interaction between having a working partner and the gender of the partner as well as interaction between the number of cohabitants and having a partner that works. The interaction with gender can again be explained by traditional views on family life. The interaction between having a working partner and the number of cohabitants can possibly be explained by stating that the effect of having a partner that works is more important when there are many cohabitants present that need to be taken care of, compared to when there are less or no cohabitants.

The negative relationship between having an unemployed partner and the probability of being an entrepreneur shows interaction with the level of education of the parents and race. The educational level of the parents as well as race interacts within the relationship between having an unemployed partner and the probability of being an entrepreneur. This can possibly be explained by that partners and their parents are likely to be of the same race and their race influences the educational levels and their prospects on the labour market. The found interactions are interesting and could be a subject of further research.

For the model testing the relationship between having a self-employed partner and the probability of being self-employed, there are two interactions. There exists interaction with the educational level and interaction with some industry categories. The positive effect of having a self-employed partner on the probability of being self-employed differs for different levels of education and different industry categories.

The negative relationship between having a partner with poor health and the probability of becoming entrepreneur, contains interaction between having a partner with poor health and the education of the father, as well as some industries. While the exact effect of the education of the parents remains difficult to explain, it can be expected that the poor health of the partner has a different effect on the probability of being entrepreneur when the entrepreneur works in a more flexible industry in which he is able to work less hours. This could be a possible explanation for the interaction effect. The final hypothesis, between having a partner with poor health and the probability of being self-employed was not supported, and therefore will not be discussed further.

5.2 Entrepreneurial Exit

In section 4.2, it was found that their exists only a significant relationship between having a partner that works and the probability of an entrepreneurial exit, having a partner that is self-employed and the probability of an entrepreneurial exit and having a partner that felt depressed and the probability of an entrepreneurial exit. Adding interaction terms to the pooled logit model testing the association between having a partner that works and the probability of an entrepreneurial exit shows that there exists interaction between the *par_work* variable and all the categories of self-reported individual health. Therefore, the effect of having a partner that works on the probability of an entrepreneurial exit is different for different health categories. It can be expected that having a partner that works is more important when the individual is in poor health, being less able to work, compared to the individual being in excellent health. Besides the interaction with health, there is no interaction with other independent variables.

The model testing the association between having a self-employed partner and the probability of an entrepreneurial exit shows interaction with the industry category retail, which is one out of thirteen industry categories. This indicates that the negative association of having a self-employed partner and the probability of an entrepreneurial exit changes when having a business in the category retail. Besides the industry category retail, the model is consistent.

The model testing the association between having a partner that felt depressed and the probability of an entrepreneurial exit shows interaction with age and the size of the firm. The effect of having a partner that felt depressed on the probability of an entrepreneurial exit is different for different age categories. This can be explained by underlying mechanisms of going towards the retirement age which might influence the mental health of individuals. The interaction with the size of the firm could be explained by a different effect of having a depressed partner when the firm is smaller or larger. A possible mechanism could be that a larger firm is mentally more demanding, and combined with the mentally more demanding household situation, the overall effect could be larger compared to when the firm is small. The interactions lead to the model being not fully consistent.

6. Robustness Checks

There are several methods to test the robustness of the results. In section 6.1, the robustness of the models testing the partner characteristics and the probability of being an entrepreneur is tested by replacing the dependent variable with a different but replaceable variable. The results are robust when the outcome and conclusions of these new models are the same. In section 6.2, fixed and random effects models are tested in order to test the robustness of both the models testing the probability of being an entrepreneur as well as the probability of an entrepreneurial exit.

6.1 Becoming an Entrepreneur

In order to test the robustness of the results of the analysis of being an entrepreneur, the dependent variable *in_selfemployed* is replaced by the variable *start*, indicating whether an individual becomes self-employed, as opposed to remaining in paid-employment. It can be expected that the mechanisms that determine whether someone is self-employed influence the decision to become an entrepreneur in the same manner. An individual is started if he in a certain year indicated to not be self-employed, and in the next year became self-employed. In the next five years, the individual is starting up his business, and therefore still considered to be a starting entrepreneur. However, since the data consists of biennial waves, an entrepreneur is considered to be a nascent entrepreneur in the first six years, instead of five years of him starting up a business. After the first six years, the individual might continue to be entrepreneur, but he cannot again become self-employed. Therefore, the observations in the years after the first six years are set to missing. The individuals in the sample that always have been self-employed are dropped from the sample, since they cannot become self-employed. Similar to the main analysis, individuals who are retired and individuals outside the age range of 51 and 65 are dropped from the sample, as well as the observations containing negative total household wealth. After the adjustments, the sample consists of 58,986 observations. In table 23, the descriptive statistics of the adjusted dependent variable are depicted.

Table 23: Descriptive Statistics of the dependent variable *Start.*

Variable	**Number of Observations**	**Mean**	**Standard Deviation**
start [0/1]	40,560	0.032	0.176

The sample consists of individuals who are currently a nascent entrepreneur or potentially could become entrepreneur. Of the sample, 3.2% indeed became entrepreneur. This percentage is considerably lower than the percentage of individuals who currently is self-employed, which was 19%. This is due to the difference in the dependent variable, as well as a small changes in the sample. In table 24, the descriptive statistics are given for both the group of interest and the reference group. It can be seen that the individuals who became self-employed are more likely to have a partner, have a working partner, and have a self-employed partner. They are less likely to have an unemployed partner, a partner with poor health or a partner that felt depressed. This was also found in the main analysis and is conform the hypotheses.

Table 24: Descriptive Statistics of the Independent Variables for the group of that started and the reference group.

	Became self-employed			**Remained paid-employed**		
Independent Variable	**Observations**	**Mean**	**Std. Dev.**	**Observations**	**Mean**	**Std. Dev.**
partner [0/1]	1,294	0.815	0.389	39,240	0.769	0.422
par_work [0/1]	1,018	0.717	0.451	29,241	0.685	0.464
par_unemployed [0/1]	753	0.031	0.172	20,725	0.033	0.180
par_selfemployed [0/1]	729	0.344	0.475	19,994	0.209	0.407
par_poorhealth [0/1]	581	0.062	0.241	16,300	0.081	0.273
par_depressed [0/1]	937	0.101	0.302	27,171	0.110	0.313

After the adjustments, a pooled logit model is constructed with *start* as the dependent variable and *partner* as the independent variable. The results are depicted in table 25. Contrary to the basic model, in the extended model the coefficient of partner is insignificant. This indicates that having a partner, compared to not having a partner does not significantly influence the probability of becoming an entrepreneur. This contradicts the findings of the main analysis, where having a partner was positively associated with the probability of being an entrepreneur.

Table 25: Pooled Logit Regression Results with *start* as dependent variable and *partner* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model + Mediator**	
Independent variable						
partner	0.336**	(0.146)	0.250	(0.160)	0.188	(0.162)
Mediating variables						
hh_wealthcat					0.036**	(0.016)
Control variables						
in_gender [1/2]			-0.384***	(0.133)	-0.385***	(0.133)
in_age [51-65]			-0.041	(0.383)	-0.045	(0.383)
in_age2			0.001	(0.003)	0.001	(0.003)
in_education			0.083***	(0.028)	0.070**	(0.029)
in_motherseducation			0.053**	(0.022)	0.051**	(0.021)
in_fatherseducation			-0.031	(0.019)	-0.034*	(0.019)
in_race						
2. black/African American			-0.283	(0.212)	-0.237	(0.212)
3. other			-0.366	(0.317)	-0.363	(0.317)
hh_cohabitants			-0.024	(0.063)	-0.018	(0.063)
in_health						
2. very good			-0.124	(0.121)	-0.109	(0.121)
3. good			-0.147	(0.136)	-0.112	(0.137)
4. fair			0.016	(0.175)	0.062	(0.176)
5. poor			-0.207	(0.395)	-0.151	(0.395)
in_industry[31]			Yes		Yes	
Indirect effects						
Via hh_wealthcat					0.062**	(0.027)
					(24.82%)	
Intercept	-3.970***	(0.133)	-4.450	(11.246)	-4.222	(11.250)
Observations	27,547		27,547		27,547	
Pseudo R^2	0.002		0.08		0.08	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

With the effect of the partner being insignificant, the first condition for mediation to exist is not satisfied. Additional statistical tests[32] show that condition 2 is satisfied by finding that having a partner significantly and positively predicts the total wealth of the household. It is also found that condition 3 is satisfied. The total wealth of the household positively and significantly predicts the probability of becoming an entrepreneur. Condition 4 is satisfied, as can be seen in table 25, since the coefficient of *partner* is reduced in the model including the mediator. These findings are similar

[31] Coefficients of the dummies are available on request from the author
[32] Results are available on request of the author

to the main analysis. However, due to condition 1 not being satisfied there is no mediation, contradicting the results of the main analysis.

In appendix B, the results are depicted of the robustness checks with *start* as the dependent variable and the independent variables *par_work, par_unemployed, par_selfemployed par_poorhealth* and *par_depressed*. It is found that having a partner that works increases the probability of becoming self-employed, ceteris paribus. Contrary to the main analysis, this relationship is not mediated by the total wealth of the household due to a violation of condition 3. Table B2 shows that having an unemployed partner does not significantly predict the probability of becoming an entrepreneur, contrary to what was found in the main analysis, where having an unemployed partner decreased the probability of being an entrepreneur. Table B3 shows the analysis of having a partner that is self-employed. Similar to the main analysis, it is found that having a partner that is self-employed increases the probability of becoming self-employed. However, due to a violation of condition 3, the relationship is not mediated by the total wealth of the household. In table B4, it can be seen that having a partner with poor health does not significantly predict the probability of becoming an entrepreneur, contrary to the findings in the main analysis. Also, there is no mediation by the own health of the individual or the hours worked by the individual. The last table, B5, shows that having a partner that felt depressed, does not significantly influence the probability of becoming an entrepreneur. It is found that having a partner that felt depressed, significantly increases the probability that the individual becomes depressed, satisfying condition 2. However, the remaining conditions are not satisfied, and therefore, there is no mediating effect of the individual having worse mental health.

The results of these robustness checks imply that the results of the main analysis about the individual being self-employed are not robust. However, it is also possible that the dependent variables are not subject to the same mechanisms that were found in the main analysis. It is possible that there are other mechanisms that influence the decision to become entrepreneur, and those mechanisms may not be present when already being an entrepreneur. In section 7, the results of this robustness check are discussed in more detail.

6.2 Fixed and Random Effects Models

In section 6.1, as a robustness check the dependent variable was replaced by a different dependent variable. However, it was found that the results were not fully robust under this analysis. In this section, a second robustness check is performed in order to determine the robustness of the models. Fixed and Random effects models are estimated in order to obtain the net effect of the partner variables on the probability of being an entrepreneur as well as the probability of leaving self-employment. Additionally, the Hausman-test is performed to determine which model is the most consistent. Based on the outcome of the test, the appropriate model is chosen. With a fixed effects logit regression, it is possible to control for unobserved heterogeneity from time-invariant other factors. These factors influence both the probability of being self-employed and the partner characteristics. For example, these factors could be religion or culture. The random effects model can be more appropriate when the group of interest is a subsample that can slightly differentiate from the larger sample. In this analysis, certain groups of individuals with partners might slightly differentiate from the total sample. Gelman (2005) notes that because of conflicting definitions, there is no clear answer to the question which model to use. However, the Hausman-test statistically answers this question, and based on the outcome of this test, the most consistent model is chosen.

6.2.1 Being an Entrepreneur

In table 26, the results are depicted from a fixed-effects logit regression model with *in_selfemployed* as dependent variable and *partner* as independent variable. The variables gender, education and race are time-invariant and are left out of the analysis.

Table 26: Fixed-effects Logit Model with *in_selfemployed* as dependent variable and *partner* as independent variable.

	Fixed-effects logit model	
Independent variable		
partner	0.512**	(0.245)
Control variables		
in_age [51-65]	0.416	(0.294)
in_age2	-0.003	(0.002)
hh_cohabitants	0.008	(0.056)
in_health		
2. very good	-0.140	(0.129)
3. good	-0.190	(0.156)
4. fair	0.066	(0.212)
5. poor	-0.361	(0.425)
in_industry[33]	Yes	
Observations	3,814	
Number of groups	841	

*** *p*-value≤0.01, ** *p*-value≤0.05, * *p*-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

The Hausman-test confirms the use of the fixed-effects model by being significant. In table 26, it can be seen that the coefficient of *partner* remains positive and significant, confirming the results found in section 4.1 and showing that the results are robust. In appendix C, fixed-effects logit regression models are presented with *par_work, par_unemployed, par_selfemployed, par_poorhealth* and *par_depressed* as independent variables. It is found that the results with regard to having a partner that works and having a partner that is self-employed are robust. However, in the fixed-effects logit model, it is found that having a partner that is unemployed does not significantly predict the probability of being an entrepreneur. The results of this model appear to be inconsistent. This is also true for the model with *par_poorhealth* as the independent variable. In appendix C, table C2, it can be seen that *par_poorhealth* does not significantly predict the probability of being self-employed. In table C3, the results are depicted from the model with *par_depressed* as the independent variable. It can be seen that in the fixed-effects model, *par_depressed* does not significantly predict the probability of being self-employed, which was also found when estimating the pooled logit model. Having estimated all the models, it can be seen

[33] Coefficients of the dummies are available on request from the author

that the models estimating the effect of having a partner that is unemployed and having a partner that has poor health are not fully robust. This is also confirm the findings with regard to the first robustness check, where it also was found that these two models were not robust.

6.2.1 Entrepreneurial Exit

In table 27, the results of a fixed-effects logit model with *exit* as dependent variable and *partner* as independent variable is depicted. It can be seen that the coefficient of *partner* is negative and not significant. The outcome of the model is similar to the outcome of the pooled logit model, indicating that the results are robust.

Table 27: Fixed-effects Logit Model with *exit* as dependent variable and *partner* as independent variable.

	Fixed-effects logit model	
Independent variable		
partner	-0.573	(0.411)
Control variables		
in_age [51-65]	-0.138	(0.550)
in_age2	0.006	(0.005)
in_firmsize	0.0003	(0.0003)
hh_cohabitants	-0.019	(0.090)
in_health		
2. very good	0.115	(0.199)
3. good	0.167	(0.238)
4. fair	0.252	(0.307)
5. poor	-0.158	(0.486)
in_industry[34]	Yes	
Observations	2,659	
Number of groups	799	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit regression coefficients are displayed with standard errors between parentheses.

In appendix C, the results are depicted of the fixed-effects models with the variables *par_work, par_unemployed, par_selfemployed, par_poorhealth* and *par_depressed* as independent variables. The model testing the effect of having a partner that works is shows a negative and significant coefficient, which was also found by the pooled logit model. Therefore, the results is robust. The

[34] Coefficients of the dummies are available on request from the author

second model testing the effect of having an unemployed partner shows a coefficient that is not significant. This is also conform the findings in the main analysis. A different outcome is found with regard to having a partner that is self-employed. In the main analysis, it was found that having a partner that is self-employed significantly reduces the probability of an entrepreneurial exit. However, the fixed effects model shows that this relationship is not significant. Therefore, the result with regard to this part of the analysis is not fully robust. The findings with regard to having a partner in poor health are similar to the main analysis. The last model tests the effect of having a partner that felt depressed and shows inconsistencies. In the main analysis, a significant effect was found, contrary to the insignificant effect found in the random effects model. The results with regard to having a partner that felt depressed are not fully robust.

7. Discussion

There are several interesting and new results obtained from this study, showing the importance of this area of research. The results show that there are some unexpected results and implications, which makes further research into this subject rewarding. Given the outcomes of this study, a few results ask for a more detailed discussion.

The analysis of the partner characteristics and the probability of being an entrepreneur shows that the partner plays a significant role in the probability of being an entrepreneur for older individuals. As expected, the partner positively influences the probability of being self-employment. It was found that this positive association was fully mediated by the total wealth of the household. The positive association between having a partner that works or having a partner that is self-employed and the probability of being self-employed was also mediated by the total wealth of the household. As expected, the partner and with that the wealth of the household plays a significant role when being self-employed. Contrary to the physical health of the partner, it was found that the mental health of the partner does not significantly influence the probability of being an entrepreneur. A possible explanation for this finding could be that poor mental health of the partner does not limit the time and money from the entrepreneurial individual and therefore, the entrepreneurial individual is not limited in being self-employed.

Contrary to the analysis with regard to being an entrepreneur, the exit analysis shows that the role of the partner is less significant when deciding to exit entrepreneurship. This can be explained by several circumstances from which the most important one is future retirement. The retirement will take place for all individuals, and can be different in that it can occur sooner or is delayed. The results show that the decision to delay retirement is influenced by the partner having paid-employment or the partner being self-employed, as well as the partner being depressed. Contrary to what was expected, having a partner that felt depressed decreases the probability of an entrepreneurial exit instead of increases the probability of an exit. A possible explanation could be that the individual prefers not to exit self-employment, since the situation at home might refrain him from being at home. The individual might be reluctant to retire early and be at home with the depressed partner. These mechanisms could explain the negative association that was found between having a partner that felt depressed and the probability of an entrepreneurial exit. The

overall presence of the partner, the physical health of the partner, or the unemployed partner do not significantly influence the probability of an entrepreneurial exit, as opposed to the probability of being an entrepreneur. Apparently and contrary to the expectations, there are other determinants of an entrepreneurial exit that are more dominant than having a partner, having an unemployed partner or having a partner in poor health. The results show that the mechanisms determining being an entrepreneur are different from the mechanisms influencing the decision to exit entrepreneurship for individuals at an older age.

Another interesting results is the interaction of gender within the relationship between having a partner and the probability of being an entrepreneur. It was found that the effect of having a partner on the probability of being an entrepreneur is different for men and women. This can be explained by a traditional view on family life based on certain family characteristics that are highly valued in the U.S. Ideal families, according to this view, have a specific structure, in which the father is the head of the family earning sufficient family wage, a stay-at-home wife and children (Collins, 1998). Even though this view might be changing, this study is based on a sample of individuals born in the second half of the 20th century, for which it can be expected that family tradition was valued differently and more according to the traditional view than nowadays. This view can explain the interaction with gender. The effect of having a partner with a stable income can, for example, expected to be higher when a women starts a business and can rely on a stable family income from her husband. In the traditional view, when a men transitions from paid-employment towards self-employment, and the wife is a stay-at-home mother, it can be expected that the effect of having a partner on the probability of being an entrepreneur is much smaller. The results of this study can be different for different countries, different ethnic groups or different religious groups in which family life is seen differently. A future direction for further research would therefore be to distinguish between these groups when studying the partner effects.

The outcome of the models testing the probability of becoming an entrepreneur also reveals interesting results. A robustness check has been performed by replacing the dependent variable indicating whether the individual is self-employed or not by a dependent variable indicating whether the individual has become an entrepreneur. The interesting outcome was that the results were not consistent, indicating two possible reasons. It could be that the results of the main analysis are not robust, which questions the validity of this study. However, it could also be that the

dynamics associated with the relationship between being an entrepreneur and the partner characteristics are not the same as the dynamics associated with the relationship between becoming an entrepreneur and the partner characteristics. In this study, the second reason is most likely to be valid. It can be argued that amongst older individuals, the decision to become an entrepreneur at an older age is influenced by several other circumstances that did not influence the probability of being an entrepreneur. The individuals in the sample studying the probability of being an entrepreneur, due to their older age, are more likely to have been an entrepreneur for several years. At the time they decided to become an entrepreneur, they were more likely to have been in their prime age. When deciding to become an entrepreneur, they were less likely to have been considering circumstances as declining (partner) health, future retirement, or the possibility of reducing working hours. When becoming an entrepreneur at an older age, it can be expected that these factors do significantly influence the decision to become an entrepreneur. Therefore, it can be expected that the underlying mechanisms significantly differ, making the probability of being an entrepreneur and the probability of becoming an entrepreneur significantly different. It can be concluded that the influence of having a partner on the decision to become an entrepreneur at an older age remains an interesting subject for further research.

Given the outcomes of this study, there are limitations that possibly have influenced the results. First of all, reverse causality is an important limitation. For the partner variables, this limitation is less important, since it is unlikely that due to being self-employed, someone has found a partner or that due to being self-employed, the partner is unemployed. However, it is likely that due to being self-employed, the partner is also self-employed or the partner decides to be a wageworker, which biases the results. It is also likely that self-employment increases the total wealth of the household since it is likely that when having a successful business, the total wealth of the household increases substantially. Due to these possible reverse causalities the results might be biased. In future research, reverse causality can be ruled out by using instrumental variables that only affect the probability of being self-employed or the probability of an entrepreneurial exit through the partner characteristics.

A second limitation is that the data consists of self-reported measures. The presence of the partner and the employment types are not affected by being self-reported, but the physical and mental health of the individuals can be biased. When an individual feels poorly, it is more likely that the reported poor or mental health is overestimated. In future research, it would be recommended to

use more objective measures indicating the physical or mental health of the individual. An example could be to use the number of health issues or to use a more formal variable indicating whether an individual is depressed.
A last limitation consists of missing data regarding the employment type of the parents as well as more detailed information about the entrepreneurial individual. In literature, the self-employment of the parents is often seen as an important influencer of the individual being self-employed or not. Also, it would be interesting to know more about how long the individuals have been self-employed, since it could be expected to significantly influence the decision to leave self-employment. Including these variables into the analysis is expected to significantly enrich the analysis.

Finally, in further research, it would be interesting to study the effects of having a partner and the partner characteristics on the probability of being entrepreneur amongst younger individuals. It can be expected that the results are different for this group, as was also found by Schiller and Crewson (1997), since the uncertainty in this phase might influence the decision to be self-employed differently. This would require an in-depth study, taking into account the wealth of the household, uncertainty, the significant influence of having mortgages, young children and many more characteristics of young families. Furthermore, besides the financial effects of having a partner, another direction of studying this subject could be to focus on the social role of the spouse, with a focus on the social network of the partner. This role is difficult to capture, but can be expected to have a significant influence on the probability of being entrepreneurial or becoming entrepreneurial, as well as the decision to exit self-employment. A last direction for future research would be to study the transitioning of individuals when they exit entrepreneurship. For individuals aged 51-65, it is likely that they retire, but they could also transition into paid-employment or unemployment. When studying the next step of indiviudals after the entrepreneurial exit, a deeper insight into the motivation of individuals can be obtained.

8. Conclusion

In this study, new insights are found into the determinants of self-employment amongst older individuals. Besides the already determined influencers of the probability of being self-employed, it is now found that the presence of a partner and the different partner characteristics significantly influence the probability of being an entrepreneur, becoming an entrepreneur or leaving self-employment. There are several relationships found between these partner characteristics and the different types of entrepreneurial activity.

First of all, it is found that having a partner, compared to not having a partner, increases the probability of being entrepreneur, ceteris paribus. This relationship is fully mediated by the total wealth of the household. Within the group of individuals with a partner it can be seen that the employment status of the partner influences the probability of being self-employed. When the partner has paid-employment, this increases the probability of being entrepreneur. Contrary, when the partner is unemployed, this decreases the probability of being entrepreneur. Both associations are mediated by the total wealth of the household. It is also found that having a partner that is self-employed, increases the probability of being self-employed, ceteris paribus. This relationship is also partly mediated by the total wealth of the household. Besides the employment status of the partner, the health status of the partner also appears to be significantly influencing the probability of being entrepreneur. Having a partner in poor health, compared to having a partner with excellent or very good health, decreases the probability of being entrepreneur. Besides the physical health of the partner, also the influence of the mental health of the partner is tested. It is found that having a partner that felt depressed does not significantly influence the probability of being self-employed.

Considering the probability of an entrepreneurial exit, it was found that having a partner does not significantly influence the probability of an entrepreneurial exit. However, the type of employment of the partner is a significant predictor of the probability of an entrepreneurial exit. An individual aged 51-65 that has a partner with paid-employment, or has a partner that is self-employed, is less likely to exit entrepreneurship. Both associations are mediated by the total wealth of the household. Having a partner that is unemployed does not significantly predict the probability of an entrepreneurial exit. Besides the types of employment, it is found that having a partner with poor physical health does not significantly predict the probability of an entrepreneurial exit. Contrary,

having a partner with poor mental health, decreases the probability of an entrepreneurial exit. This relationship is not mediated by worse mental health of the entrepreneurial individual.

Overall, it can be concluded that for individuals aged 51-65, having a partner, and the different partner characteristics significantly and differently influence the probability of being self-employed, as well as the entry and exit dynamics of self-employment. Therefore, the stability of the partner is an important determinant of self-employment and should be taken into account when stimulating entrepreneurship among older individuals. The current household situation of the older individuals is likely to influence, positively or negatively, the effectiveness of the policies. Policy makers should take into account that individuals that have a partner that is currently active in the labour force, increases the probability of being entrepreneur and decreases the probability of exiting entrepreneurship. These findings imply that it is important to enable older individuals to continue working, being self-employed or in paid-employment. This could be done by offering good access to health care for older individuals, as well as offering flexible working hours. For the individuals that are self-employed, this study shows the importance of having a stable household background. It becomes clear that having a partner that is self-employed or that has paid-employment, enhances the probability of being self-employed. Self-employed individuals could stimulate their partners to continue working, which enables the entrepreneurial individual to continue with his or her business.

References

Ai, C., & Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics Letters, 80*(1), 123-129. Retrieved from https://www.sciencedirect.com/science/article/pii/S0165176503000326

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173. Retrieved from http://webcom.upmf-grenoble.fr/LIP/Perso/DMuller/GSERM/Articles/Journal%20of%20Personality%20and%20Social%20Psychology%201986%20Baron.pdf

Bates, T. (1995). Self-employment entry across industry groups. *Journal of Business Venturing, 10*(2), 143-156. Retrieved from https://www.sciencedirect.com/science/article/pii/088390269400018P

Bates, T. (1997). Financing small business creation: The case of Chinese and Korean immigrant entrepreneurs. *Journal of Business Venturing, 12*(2), 109-124. Retrieved from https://www.sciencedirect.com/science/article/pii/S0883902696000547

Benazon, N. R., & Coyne, J. C. (2000). Living with a depressed spouse. *Journal of Family Psychology, 14*(1), 71. Retrieved from http://psycnet.apa.org/buy/2000-13848-005

Bernhardt, I. (1994). Comparative advantage in self-employment and paid work. *Canadian Journal of Economics, 27*(2), 273-289. Retrieved from http://www.jstor.org/stable/pdf/135747.pdf?refreqid=excelsior:709e751e0a95647f5667b1929e4672e5

Blanchflower, D. G. (2000). Self-employment in OECD countries. *Labour Economics, 7*(5), 471-505. Retrieved from https://www.sciencedirect.com/science/article/pii/S0927537100000117

Boden Jr, R. J. (1999). Flexible working hours, family responsibilities, and female self-employment: Gender differences in self-employment selection. *American Journal of Economics and Sociology, 58*(1), 71-83. Retrieved from https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1536-7150.1999.tb03285.x

Brown, S., Farrell, L., & Harris, M. (2003). Who are the self-employed? A new approach. *Monash University, Australia. Department of Economics and Business Statistics, working paper, 11*, 2003. Retrieved from http://repec.org/res2003/Brown.pdf

Brown, S., Farrell, L., & Sessions, J. G. (2006). Self-employment matching: An analysis of dual earner couples and working households. *Small Business Economics, 26*(2), 155-172. Retrieved from https://link.springer.com/article/10.1007/s11187-004-6489-5

Bruce, D. (1999). Do husbands matter? Married women entering self-employment. *Small Business Economics, 13*(4), 317-329. Retrieved from https://link.springer.com/article/10.1023/A:1008179214572

Brüderl, J., & Preisendörfer, P. (1998). Network support and the success of newly founded business. *Small Business Economics, 10*(3), 213-225. Retrieved from https://link.springer.com/article/10.1023/A:1007997102930

Burke, A. E., Fitzroy, F. R., & Nolan, M. A. (2002). Self-employment wealth and job creation: The roles of gender, non-pecuniary motivation and entrepreneurial ability. *Small Business Economics, 19*(3), 255-270. Retrieved from https://link.springer.com/article/10.1023/A%3A1019698607772

Collins, P. H. (1998). It's all in the family: Intersections of gender, race, and nation. *Hypatia*, *13*(3), 62-82. Retrieved from https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1527-2001.1998.tb01370.x

Cowling, M., & Taylor, M. (2001). Entrepreneurial women and men: two different species?. *Small Business Economics*, *16*(3), 167-175. Retrieved from https://link.springer.com/article/10.1023/A:1011195516912

Curran, J., & Blackburn, R. A. (2001). Older people and the enterprise society: Age and self-employment propensities. *Work, Employment and Society*, *15*(4), 889-902. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/095001701400438279

DeTienne, D. R. (2010). Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development. *Journal of Business Venturing*, *25*(2), 203-215. Retrieved from https://www.sciencedirect.com/science/article/pii/S088390260800058X

Eden, D. (1975). Organizational membership vs self-employment: Another blow to the American dream. *Organizational Behavior and Human Performance*, *13*(1), 79-94. Retrieved from https://www.sciencedirect.com/science/article/pii/0030507375900069

Ettner, S. L. (1996). The opportunity costs of elder care. *Journal of Human Resources*, *31*(1), 189-205. Retrieved from http://www.jstor.org/stable/146047?seq=1#page_scan_tab_contents

Evans, D. S., & Jovanovic, B. (1989). An estimated model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy*, *97*(4), 808-827. Retrieved from https://www.jstor.org/stable/pdf/1832192.pdf

Fairlie, R. W., Kapur, K., & Gates, S. (2011). Is employer-based health insurance a barrier to entrepreneurship?. *Journal of Health Economics*, *30*(1), 146-162. Retrieved from https://www.sciencedirect.com/science/article/pii/S0167629610001207

Gelman, A. (2005). Analysis of variance—why it is more important than ever. *The annals of statistics*, *33*(1), 1-53. Retrieved from http://www.stat.columbia.edu/~gelman/research/published/AOS259.pdf

Gentry, W. M., & Hubbard, R. G. (2004). Entrepreneurship and Household Saving. *The BE Journal of Economic Analysis & Policy*, *4*(1), 1-57. Retrieved from https://core.ac.uk/download/pdf/6894199.pdf

Hessels, J., Grilo, I., Thurik, R., & van der Zwan, P. (2011). Entrepreneurial exit and entrepreneurial engagement. *Journal of Evolutionary Economics*, *21*(3), 447-471. Retrieved from https://link.springer.com/article/10.1007/s00191-010-0190-4

Hessels, J., Rietveld, C. A., & van der Zwan, P. (2017). Self-employment and work-related stress: The mediating role of job control and job demand. *Journal of Business Venturing*, *32*(2), 178-196. Retrieved from https://www.sciencedirect.com/science/article/pii/S0883902616301847

Hessels, J., Rietveld, N., Thurik, R., & van der Zwan, P. (2017). Depression and entrepreneurial exit. *Academy of Management Perspectives*. Retrieved from https://journals.aom.org/doi/abs/10.5465/amp.2016.0183

Hong, J., & Seltzer, M. M. (1995). The psychological consequences of multiple roles: The nonnormative case. *Journal of Health and Social Behavior*, *36*(4), 386-398. Retrieved from

http://www.jstor.org/stable/2137327?seq=1#page_scan_tab_contents

Hout, M., & Rosen, H. S. (1999). Self-employment, family background, and race (No. w7344). *National Bureau of Economic Research.* Retrieved from http://www.nber.org/papers/w7344

Hurst, E., & Lusardi, A. (2004). Liquidity constraints, household wealth, and entrepreneurship. *Journal of Political Economy*, *112*(2), 319-347. Retrieved from https://www.journals.uchicago.edu/doi/pdfplus/10.1086/381478

Jamal, M. (1997). Job stress, satisfaction, and mental health: an empirical examination of self-employed and non-self-employed Canadians. *Journal of Small Business Management*, *35*(4), 48-57. Retrieved from https://search.proquest.com/docview/220955158?pq-origsite=gscholar

Karoly, L. A., & Zissimopoulos, J. (2004). Self-employment and the 50+ population. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=BF2B0481CD196964E0D2CF60475BC955?doi=10.1.1.198.7701&rep=rep1&type=pdf

Kautonen, T. (2008). Understanding the older entrepreneur: Comparing third age and prime age entrepreneurs in Finland. *International Journal of Business Science and Applied Management*, *3*(3), 3-13. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.682.2586&rep=rep1&type=pdf

Kautonen, T., Down, S., & South, L. (2008). Enterprise support for older entrepreneurs: The case of PRIME in the UK. *International Journal of Entrepreneurial Behavior & Research*, *14*(2), 85-101. Retrieved from https://www.emeraldinsight.com/doi/full/10.1108/13552550810863071

Kautonen, T., Kibler, E., & Minniti, M. (2017). Late-career entrepreneurship, income and quality of life. *Journal of Business Venturing*, *32*(3), 318-333. Retrieved from https://www.sciencedirect.com/science/article/pii/S0883902617301222

Kohler, U., Karlson, K.B., Holm, A. (2011). Comparing Coefficients of Nested Nonlinear Probability Models. *The Stata Journal*, *11*, 420-438. Retrieved from https://www.researchgate.net/publication/254452705_Comparing_Coefficients_of_Nested_Nonlinear_Probability_Models

Le, A. T. (1999). Empirical studies of self-employment. *Journal of Economic Surveys*, *13*(4), 381-416. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-6419.00088

Levesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, *21*(2), 177-194. Retrieved from https://www.sciencedirect.com/science/article/pii/S0883902605000388

Lin, Z., Picot, G., & Compton, J. (2000). The entry and exit dynamics of self-employment in Canada. *Small Business Economics*, *15*(2), 105-125. Retrieved from https://link.springer.com/article/10.1023/A:1008150516764

Martire, L. M., Stephens, M. A. P., & Atienza, A. A. (1997). The interplay of work and caregiving: Relationships between role satisfaction, role involvement, and caregivers' well-being. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *52*(5), S279-S289. https://academic.oup.com/psychsocgerontology/article/52B/5/S279/629014

Parker, S. C., & Rougier, J. C. (2007). The retirement behaviour of the self-employed in Britain. *Applied*

Economics, *39*(6), 697-713. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/00036840500447807

Pavalko, E. K., & Artis, J. E. (1997). Women's caregiving and paid work: Causal relationships in late midlife. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 52*(4), S170-S179. Retrieved from https://academic.oup.com/psychsocgerontology/article/52B/4/S170/546695

Pavalko, E. K., & Woodbury, S. (2000). Social roles as process: Caregiving careers and women's health. *Journal of Health and Social Behavior, 41*(1), 91-105. Retrieved from http://www.jstor.org/stable/2676362?seq=1#page_scan_tab_contents

Pavalko, E. K., & Henderson, K. A. (2006). Combining care work and paid work: Do workplace policies make a difference?. *Research on Aging, 28*(3), 359-374. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/0164027505285848

Pienta, A. M. (2003). Partners in marriage: An analysis of husbands' and wives' retirement behavior. *Journal of Applied Gerontology*, *22*(3), 340-358. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/0733464803253587

RAND Corporation. (2018). RAND HRS Longitudinal File 2014 (V2), supported by NIA and SSA. Retrieved from https://www.rand.org/labor/aging/dataprod/hrs-data.html

Rees, H., & Shah, A. (1986). An empirical analysis of self-employment in the UK. *Journal of Applied Econometrics, 1*(1), 95-108. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1002/jae.3950010107

Rietveld, C. A., Kippersluis, H., & Thurik, A. R. (2015). Self-employment and health: Barriers or benefits?. *Health Economics, 24*(10), 1302-1313. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1002/hec.3087

Robinson, P. B., & Sexton, E. A. (1994). The effect of education and experience on self-employment success. *Journal of Business Venturing*, *9*(2), 141-156. https://www.sciencedirect.com/science/article/pii/088390269490006X

Ronstadt, R. (1986). Exit, stage left why entrepreneurs end their entrepreneurial careers before retirement. *Journal of Business Venturing*, *1*(3), 323-338. Retrieved from https://www.sciencedirect.com/science/article/pii/088390268690008X

Sanders, J. M., & Nee, V. (1996). Immigrant self-employment: The family as social capital and the value of human capital. *American Sociological Review 61*(2), 231-249. Retrieved from https://www.jstor.org/stable/2096333?seq=1#page_scan_tab_contents

Schiller, B. R., & Crewson, P. E. (1997). Entrepreneurial origins: A longitudinal inquiry. *Economic Inquiry, 35*(3), 523-531. Retrieved from https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1465-7295.1997.tb02029.x

Small, M. (2012). Understanding the older entrepreneur. *Working with Older People*, *16*(3), 132-140. Retrieved from https://www.emeraldinsight.com/doi/full/10.1108/13663661211260952

Stephan, U., & Roesler, U. (2010). Health of entrepreneurs versus employees in a national representative sample. *Journal of Occupational and Organizational Psychology, 83*(3), 717-738. Retrieved from

https://onlinelibrary.wiley.com/doi/full/10.1348/096317909X472067

Taylor, M. P. (1996). Earnings, independence or unemployment: why become self-employed?. *Oxford Bulletin of Economics and Statistics*, *58*(2), 253-266. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/j.1468-0084.1996.mp58002003.x

Verbakel, E., & De Graaf, P. M. (2009). Partner effects on labour market participation and job level: Opposing mechanisms. *Work, Employment and Society*, *23*(4), 635-654. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/0950017009344909

Wadhwa, V., Holly, K., Aggarwal, R., & Salkever, A. (2009). Anatomy of an entrepreneur: Family background and motivation. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1431263

Wellington, A. J. (2001). Health insurance coverage and entrepreneurship. *Contemporary Economic Policy*, *19*(4), 465-478. Retrieved from https://onlinelibrary.wiley.com/doi/epdf/10.1093/cep/19.4.465

Wennberg, K., Wiklund, J., DeTienne, D. R., & Cardon, M. S. (2010). Reconceptualizing entrepreneurial exit: Divergent exit routes and their drivers. *Journal of Business Venturing*, *25*(4), 361-375. Retrieved from https://www.sciencedirect.com/science/article/pii/S0883902609000020

Wennberg, K., & DeTienne, D. R. (2014). What do we really mean when we talk about 'exit'? A critical review of research on entrepreneurial exit. *International Small Business Journal*, *32*(1), 4-16. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/0266242613517126

Zissimopoulos, J. M., & Karoly, L. A. (2007). Transitions to self-employment at older ages: The role of wealth, health, health insurance and other factors. *Labour Economics*, *14*(2), 269-295. Retrieved from https://www.sciencedirect.com/science/article/pii/S0927537105000552

Appendices

Appendix A

Table A1: Pooled Logit Regression Results with *in_depressed* as dependent variable and *par_depressed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**	
Independent variable				
par_depressed	0.805***	(0.070)	0.592***	(0.075)
Control variables				
in_gender [1/2]			0.420***	(0.072)
in_age [51-65]			0.128	(0.193)
in_age2			-0.001	(0.002)
in_education			-0.041***	(0.013)
in_motherseducation			-0.026**	(0.012)
in_fatherseducation			-0.025**	(0.011)
in_race				
2. black/African American			0.168*	(0.098)
3. other			0.100	(0.159)
hh_cohabitants			0.040	(0.026)
in_health				
2. very good			0.287***	(0.095)
3. good			0.862***	(0.096)
4. fair			1.493***	(0.108)
5. poor			2.194***	(0.161)
in_industry[35]			Yes	
Intercept	-2.517***	(0.034)	-6.089	(5.603)
Observations	21,584		21,584	
Pseudo R^2	0.011		0.082	

*** *p*-value≤0.01, ** *p*-value≤0.05, * *p*-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[35] Coefficients of the dummies are available on request from the author

Table A2: Pooled Logit Regression Results with *in_selfemployed* as dependent variable and *in_depressed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**	
Independent variable				
in_depressed	-0.052	(0.076)	0.073	(0.083)
Control variables				
in_gender [1/2]			-0.551***	(0.083)
in_age [51-65]			-0.186	(0.134)
in_age2			0.002	(0.001)
in_education			0.095***	(0.017)
in_motherseducation			0.019	(0.014)
in_fatherseducation			-0.009	(0.012)
in_race				
2. black/African American			-0.375***	(0.133)
3. other			-0.292	(0.198)
hh_cohabitants			0.010	(0.030)
in_health				
2. very good			-0.280***	(0.067)
3. good			-0.451***	(0.081)
4. fair			-0.232**	(0.102)
5. poor			0.055	(0.200)
in_industry[36]			Yes	
Intercept	-1.344***	(0.332)	4.298	(3.893)
Observations	21,584		21,584	
Pseudo R^2	0.000		0.160	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[36] Coefficients of the dummies are available on request from the author

Appendix B

Table B1: Pooled Logit Regression Results with *start* as dependent variable and *par_work* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model Including 1 Mediator**	
Independent variable						
par_work	0.260**	(0.129)	0.268**	(0.130)	0.264**	(0.130)
Mediating variables						
hh_wealthcat					0.026	(0.018)
Control variables						
in_gender [1/2]			-0.367**	(0.149)	-0.369**	(0.149)
in_age [51-65]			-0.18	(0.415)	-0.191	(0.415)
in_age2			0.002	(0.004)	0.002	(0.003)
in_education			0.090***	(0.032)	0.080**	(0.033)
in_motherseducation			0.051**	(0.025)	0.050**	(0.025)
in_fatherseducation			-0.037*	(0.022)	-0.039*	(0.022)
in_race						
2. black/African			-0.182	(0.246)	-0.151	(0.246)
3. other			-0.353	(0.356)	-0.353	(0.357)
hh_cohabitants			-0.011	(0.072)	-0.006	(0.071)
in_health						
2. very good			-0.102	(0.134)	-0.091	(0.134)
3. good			-0.189	(0.150)	-0.162	(0.151)
4. fair			-0.039	(0.200)	-0.007	(0.200)
5. poor			-0.592	(0.460)	-0.550	(0.461)
in_industry[37]			Yes		Yes	
Indirect effects						
Via hh_wealthcat					0.006 (2.09%)	(0.004)
Intercept	-3.831***	(0.114)	0.084	(12.200)	0.209	(12.208)
Observations	21,211		21,211		21,211	
Pseudo R^2	0.001		0.080		0.081	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[37] Coefficients of the dummies are available on request from the author

Table B2: Pooled Logit Regression Results with *start* as dependent variable and *par_unemployed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model Including 1 Mediator**	
Independent variable						
par_unemployed	-0.296	(0.375)	-0.187	(0.377)	-0.176	(0.379)
Mediating variables						
hh_wealthcat					0.015	(0.020)
Control variables						
in_gender [1/2]			-0.321*	(0.166)	-0.324*	(0.166)
in_age [51-65]			-0.085	(0.496)	-0.086	(0.496)
in_age2			0.001	(0.004)	0.001	(0.004)
in_education			0.087**	(0.036)	0.082**	(0.036)
in_motherseducation			0.060**	(0.030)	0.059**	(0.030)
in_fatherseducation			-0.023	(0.025)	-.025	(0.026)
in_race						
2. black/African			-0.201	(0.296)	-0.183	(0.296)
3. other			-0.320	(0.396)	-0.320	(0.397)
hh_cohabitants			-0.030	(0.088)	-0.028	(0.088)
in_health						
2. very good			-0.104	(0.150)	-0.098	(0.151)
3. good			-0.183	(0.174)	-0.169	(0.176)
4. fair			0.143	(0.219)	0.158	(0.219)
5. poor			-0.418	(0.523)	-0.398	(0.525)
in_industry[38]			Yes		Yes	
Indirect effects						
hh_wealthcat					-0.011 (5.88%)	(0.016)
Intercept	-3.571***	(0.072)	-2.815	(14.578)	-2.751	(14.593)
Observations	15,057		15,057		15,057	
Pseudo R^2	0.0002		0.087		0.087	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[38] Coefficients of the dummies are available on request from the author

Table B3: Pooled Logit Regression Results with *start* as dependent variable and *par_selfemployed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model Including 1 Mediator**	
Independent variable						
par_selfemployed	0.734***	(0.152)	0.587***	(0.156)	0.602***	(0.165)
Mediating variables						
hh_wealthcat					-0.008	(0.022)
Control variables						
in_gender [1/2]			-0.415**	(0.163)	-0.414**	(0.163)
in_age [51-65]			-0.071	(0.505)	-0.071	(0.504)
in_age2			0.001	(0.004)	0.001	(0.004)
in_education			0.085**	(0.036)	0.088**	(0.036)
in_motherseducation			0.062**	(0.030)	0.062**	(0.030)
in_fatherseducation			-0.029	(0.026)	-0.028	(0.026)
in_race						
2. black/African			-0.119	(0.296)	-0.128	(0.295)
3. other			-0.297	(0.400)	-0.297	(0.399)
hh_cohabitants			-0.026	(0.088)	-0.027	(0.088)
in_health						
2. very good			-0.063	(0.154)	-0.065	(0.154)
3. good			-0.107	(0.178)	-0.113	(0.178)
4. fair			0.211	(0.220)	0.204	(0.220)
5. poor			-0.304	(0.525)	-0.312	(0.527)
in_industry[39]			Yes		Yes	
Indirect effects						
hh_wealthcat					-0.015 (-2.50%)	(0.038)
Intercept	-3.782***	(0.086)	-3.047	(14.837)	-3.075	(14.833)
Observations	14,586		14,586		14,586	
Pseudo R^2	0.012		0.095		0.095	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[39] Coefficients of the dummies are available on request from the author

Table B4: Pooled Logit Regression Results with *start* as dependent variable and *par_poorhealth* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**	
Independent variable				
par_poorhealth	-0.581*	(0.347)	-0.459	(0.363)
Control variables				
in_gender [1/2]			-0.376**	(0.188)
in_age [51-65]			0.203	(0.561)
in_age2			-0.001	(0.005)
in_education			0.110***	(0.040)
in_motherseducation			0.042	(0.029)
in_fatherseducation			-0.049*	(0.029)
in_race				
2. black/African American			0.004	(0.323)
3. other			-0.300	(0.459)
hh_cohabitants			-0.084	(0.089)
in_health				
2. very good			-0.105	(0.161)
3. good			-0.317	(0.194)
4. fair			-0.075	(0.265)
5. poor			-0.214	(0.610)
in_industry[40]			Yes	
Intercept	-3.579***	(0.082)	-10.234	(16.481)
Observations	12,045		12,045	
Pseudo R^2	0.002		0.085	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[40] Coefficients of the dummies are available on request from the author

Table B4(continued): Pooled Logit Regression Results with *start* as dependent variable and *par_poorhealth* as independent variable.

	Model 3: Extended Model including the mediator *in_health*		**Model 4: Extended Model including the mediator *in_hoursworked***		**Model 5: Extended Model including both mediators**	
Independent variable						
par_poorhealth	-0.441	(0.360)	-0.460	(0.363)	-0.442	(0.360)
Mediating variables						
in_health	-0.090	(0.079)			-0.090	(0.079)
in_hoursworked			-0.017***	(0.006)	-0.017***	(0.006)
Control variables						
in_gender [1/2]	-0.372**	(0.188)	-0.515**	(0.201)	-0.513**	(0.201)
in_age [51-65]	0.201	(0.560)	0.303	(0.559)	0.300	(0.558)
in_age2	-0.001	(0.005)	-0.002	(0.005)	-0.002	(0.005)
in_education	0.109***	(0.040)	0.114***	(0.040)	0.113***	(0.040)
in_motherseducation	0.043	(0.029)	0.042	(0.029)	0.042	(0.029)
in_fatherseducation	-0.049*	(0.029)	-0.049*	(0.029)	-0.049*	(0.029)
in_race						
2. black/African American	0.009	(0.319)	-0.015	(0.320)	-0.010	(0.316)
3. other	-0.284	(0.457)	-0.302	(0.458)	-0.284	(0.456)
hh_cohabitants	-0.085	(0.089)	-0.073	(0.090)	-0.074	(0.090)
in_health						
2. very good			-0.109	(0.160)		
3. good			-0.311	(0.194)		
4. fair			-0.081	(0.265)		
5. poor			-0.265	(0.619)		
in_industry[41]	Yes		Yes		Yes	
Indirect effects						
Via in_health	-0.034 (7.20%)	(0.030)			-0.034 (7.09%)	(0.030)
Via in_hoursworked			-0.011 (2.24%)	(0.009)	-0.010 (1.97%)	(0.009)
Intercept	-10.095	(16.454)	-11.945		-11.780	(16.383)
Observations	12,045		12,045		12,045	
Pseudo R^2	0.085		0.091		0.091	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[41] Coefficients of the dummies are available on request from the author

Table B5: Pooled Logit Regression Results with *start* as dependent variable and *par_depressed* as independent variable.

	Model 1: Basic Model		**Model 2: Extended Model**		**Model 3: Extended Model Including 1 Mediator**	
Independent variable						
par_depressed	-0.158	(0.187)	-0.080	(0.187)	-0.074	(0.187)
Mediating variables						
in_depressed					-0.163	(0.225)
Control variables						
in_gender [1/2]			-0.346**	(0.163)	-0.342**	(0.163)
in_age [51-65]			-0.050	(0.455)	-0.048	(0.455)
in_age2			0.001	(0.004	0.001	(0.004)
in_education			0.110***	(0.035)	0.110***	(0.035)
in_motherseducation			0.065**	(0.029)	0.065**	(0.028)
in_fatherseducation			-0.045*	(0.025)	-0.045*	(0.025)
in_race						
2. black/African American			-0.207	(0.290)	-0.207	(0.290)
3. other			-0.624	(0.470)	-0.620	(0.470)
hh_cohabitants			-0.014	(0.080)	-0.013	(0.080)
in_health						
2. very good			-0.106	(0.143)	-0.105	(0.143)
3. good			-0.253	(0.168)	-0.247	(0.168)
4. fair			-0.055	(0.221)	-0.037	(0.222)
5. poor			-0.777	(0.604)	-0.749	(0.602)
in_industry[42]			Yes		Yes	
Indirect Effects						
Via in_depressed					-0.009 (10.52%)	(0.011)
Intercept	-3.667***	(0.071)	-3.818	(13.405)	-3.869	(13.397)
Observations	17,957		17,957		17,957	
Pseudo R^2	0.0002		0.083		0.083	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[42] Coefficients of the dummies are available on request from the author

Appendix C

Table C1: Fixed-Effects Logit Model with *in_selfemployed* as dependent variable and three employment characteristics as independent variables.

	Fixed Effects Pooled Logit Model: *par_work*		**Fixed Effects Pooled Logit Model: *par_unemployed***		**Fixed Effects Pooled Logit Model 3: *par_selfemployed***	
Independent variable						
par_work	0.433***	(0.145)				
par_unemployed			-0.124	(0.401)		
par_selfemployed					0.930***	(0.247)
Control variables						
in_age [51-65]	0.392	(0.338)	0.573	(0.420)	0.476	(0.434)
in_age2	-0.003	(0.003)	-0.004	(0.004)	-0.003	(0.004)
hh_cohabitants	0.009	(0.066)	0.016	(0.082)	0.017	(0.084)
in_health						
2. very good	-0.178	(0.145)	-0.142	(0.182)	-0.208	(0.188)
3. good	-0.164	(0.175)	-0.030	(0.223)	-0.142	(0.231)
4. fair	0.092	(0.239)	0.513*	(0.311)	0.411	(0.319)
5. poor	-1.183**	(0.497)	-0.504	(0.667)	-0.900	(0.721)
in_industry[43]	Yes		Yes		Yes	
Observations	2,941		1,894		1,814	
Number of groups	660		448		434	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[43] Coefficients of the dummies are available on request from the author

Table C2: Fixed-Effects Logit Model with *in_selfemployed* as dependent variable and *par_poorhealth* as independent variable.

	Fixed Effects Logit Model	
Independent variable		
par_poorhealth	0.424	(0.696)
Control variables		
in_age [51-65]	0.419	(0.476)
in_age2	-0.003	(0.004)
hh_cohabitants	0.096	(0.103)
in_health		
2. very good	-0.185	(0.191)
3. good	-0.278	(0.244)
4. fair	-0.064	(0.371)
5. poor	-1.396*	(0.831)
in_industry[44]	Yes	
Observations	1,454	
Number of groups	363	

*** *p*-value≤0.01, ** *p*-value≤0.05, * *p*-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[44] Coefficients of the dummies are available on request from the author

Table C3: Fixed-Effects Logit Model with *in_selfemployed* as dependent variable and *par_depressed* as independent variable.

	Fixed-effects logit model	
Independent variable		
par_depressed	0.013	(0.222)
Control variables		
in_age [51-65]	0.525	(0.438)
in_age2	-0.004	(0.004)
hh_cohabitants	-0.046	(0.084)
in_health		
2. very good	-0.247	(0.181)
3. good	-0.317	(0.218)
4. fair	0.081	(0.290)
5. poor	-1.613***	(0.609)
in_industry[45]	Yes	
Observations	1,949	
Number of groups	473	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[45] Coefficients of the dummies are available on request from the author

Table C4: Random Effects Model with *exit* as dependent variable and *par_work* as independent variable.

	Random Effects Logit Model	
Independent variable		
par_work	-0.196*	(0.104)
Control variables		
in_gender	0.906***	(0.127)
in_age [51-65]	-0.445	(0.307)
in_age2	0.005*	(0.003)
in_education	-0.061***	(0.020)
in_firmsize	-1.53e-06	(7.75e-06)
in_race		
2. Black/African American	0.743***	(0.198)
3. Other	0.053	(0.273)
hh_cohabitants	0.036	(0.045)
in_health		
2. very good	0.081	(0.120)
3. good	0.345***	(0.131
4. fair	0.811***	(0.166)
5. poor	0.711**	(0.301)
in_industry[46]	Yes	
Observations	6,067	
Number of groups	2,231	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[46] Coefficients of the dummies are available on request from the author

Table C5: Fixed Effects Logit Model with *exit* as dependent variable and *par_unemployed* as independent variable.

	Fixed Effects Logit Model	
Independent variable		
par_unemployed	-0.666	(0.838)
Control variables		
in_age [51-65]	2.118**	(0.888)
in_age2	-0.013*	(0.008)
in_firmsize	-0.001	(0.003)
hh_cohabitants	0.126	(0.143)
in_health		
2. very good	0.300	(0.313)
3. good	0.368	(0.368)
4. fair	0.601	(0.470)
5. poor	0.574	(0.751)
in_industry[47]	Yes	
Observations	1,288	
Number of groups	404	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[47] Coefficients of the dummies are available on request from the author

Table C6: Fixed Effects Logit Model with *exit* as dependent variable and *par_selfemployed* as independent variable.

	Fixed Effects Logit Model	
Independent variable		
par_selfemployed	0.709	(0.516)
Control variables		
in_age [51-65]	2.317**	(0.914)
in_age2	-0.014*	(0.008)
in_firmsize	-0.001	(0.003)
hh_cohabitants	0.161	(0.147)
in_health		
2. very good	0.301	(0.320)
3. good	0.297	(0.377)
4. fair	0.571	(0.480)
5. poor	0.537	(0.770)
in_industry[48]	Yes	
Observations	1,246	
Number of groups	393	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[48] Coefficients of the dummies are available on request from the author

Table C7: Random Effects Logit Model with *exit* as dependent variable and *par_poorhealth* as independent variable.

	Random Effects Logit Model	
Independent variable		
par_poorhealth	-0.008	(0.269)
Control variables		
in_gender	0.896***	(0.171)
in_age [51-65]	-0.344	(0.419)
in_age2	0.004	(0.004)
in_education	-0.063**	(0.028)
in_firmsize	-0.0004	(0.0001)
in_race		
2. Black/African American	1.348***	(0.304)
3. Other	0.029	(0.383)
hh_cohabitants	0.039	(0.066)
in_health		
2. very good	0.126	(0.154)
3. good	0.509***	(0.175)
4. fair	0.618**	(0.243)
5. poor	0.459	(0.484)
in_industry[49]	Yes	
Observations	3,772	
Number of groups	1,633	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[49] Coefficients of the dummies are available on request from the author

Table C8: Fixed-Effects Logit Model with *exit* as dependent variable and *par_depressed* as independent variable.

	Random Effects Logit Model	
Independent variable		
par_depressed	-0.211	(0.170)
Control variables		
in_gender	0.942***	(0.164)
in_age [51-65]	-0.697*	(0.389)
in_age2	0.007**	(0.003)
in_education	-0.077***	(0.024)
in_firmsize	-4.98e-07	(7.75e-06)
in_race		
2. Black/African American	0.698***	(0.261)
3. Other	-0.158	(0.344)
hh_cohabitants	0.109*	(0.056)
in_health		
2. very good	-0.121	(0.147)
3. good	0.203	(0.162)
4. fair	0.808***	(0.204)
5. poor	0.773**	(0.364)
in_industry[50]	Yes	
Observations	4,725	
Number of groups	1,853	

*** p-value≤0.01, ** p-value≤0.05, * p-value≤0.1 (two-sided). Pooled Logit Regression coefficients are displayed with standard errors between parentheses.

[50] Coefficients of the dummies are available on request from the author