'The Role a Feathered Nest Plays in the Likelihood of a Young Adult Returning to the Parental Home in the Netherlands: An Explanatory Analysis using Dutch Register Data'

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Word Count: 17,913

Date: 14th of July, 2023

Abstract

Recently, the transition into adulthood has become a more complex and less standardised event. Nevertheless, leaving the parental home is still widely regarded as the most significant marker of the transition to adulthood. Despite this, as the life course has become more fluid, a trend in which young adults return to the parental home after a period of independent living also known as boomeranging has emerged. The literature puts forward three main reasons for returning; education completion, unemployment and partnership dissolution. Although, less is known about the influence of parental characteristics on the likelihood of returning. For instance, the role the financial and housing situation of the parents alongside the social relationship between the parents and child plays in the return process, also known as the 'Feathered Nest Hypothesis.' Using Dutch register data provided by Statistics Netherlands, this study aimed to assess what role a feathered nest plays in the return process. This research observed individuals aged 17-35 throughout the period 2012-2020 and employed a number of variables which provided information on parents and the parental home alongside information on the young adult. Through implementing an event history analysis, this study found an association between a feathered nest and the likelihood of a young adult returning to the parental home. A high parental income, an owner-occupied parental home as opposed to socially rented and a parental home containing both parents were observed to increase the likelihood of a return to the parental home.

Key Words

Feathered Nest, Boomeranging, Young Adults, Housing, Parental Home, Netherlands, Register Data

Acknowledgements

Firstly, I would like to thank my thesis supervisor Clara Mulder who helped me immensely throughout this process. Her feedback and willingness to answer my questions did not go unnoticed. The support which she provided me throughout writing the thesis was more than appreciated. Secondly, I would also like to thank Pau Baizan for his role as second supervisor in which he provided me with a lot of helpful suggestions and feedback. Whilst completing my master thesis, I was fortunate enough to undertake an internship at Statistics Netherlands which I have thoroughly enjoyed. Throughout this internship, my supervisor Niels Kooiman has been a great support system. Both Niels and Carel (Statistics Netherlands) helped me immensely throughout this process, through initially deciding on a topic and later through providing me with helpful feedback and a willingness to answer all my questions. I would like to thank Niels Kooiman in particular for his efforts in translating each of the variables in the dataset from Dutch to English, a very time consuming process and for helping me in wrapping my head around using register data. Additionally, I would like to show my gratitude to Lonneke Van den Berg who not only provided me with the dataset but also went above and beyond in helping me with any questions I had and providing me with very useful feedback. Lastly, I would also like to thank my friends and family for their support throughout this stressful but enjoyable process. I hope you enjoy reading my thesis.

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1. Introduction

In recent years, the transition into adulthood has become a more complex and less standardised event with young adults experiencing different pathways to entering adult life (Sandberg-Thoma et al., 2015; Van den Berg et al., 2018). Despite this, leaving the parental home is still widely regarded as an important life course event and a significant marker of the transition into adulthood (Mulder, 2009). Consequently, scholars have long been interested in the departure from the parental home, with such a move coinciding with the acquisition of a number of adult roles. Such roles include the gaining of social, residential and financial independence. Evidently, the gaining of such autonomy proves to be a central part of the decision-making process of leaving the parental home for the first time (Goldscheider & Goldscheider, 1999; Mulder & Clark, 2000; Koc, 2007; Stone et al., 2013). In more recent times, it has become increasingly difficult for young adults to make the transition to adulthood. Scholars have described the progression from the parental home into employment, partnership and residential independence as more complex, protracted and late (Billari and Liefbroer, 2010). Greater instability and fluidity in the workplace means stable full-time employment is not as accessible for young adults (Furstenberg et al., 2005). Additionally, the difficulty to access the housing market has left gaining social and residential independence to be increasingly challenging. The changing landscape surrounding the transition into adulthood has left some scholars arguing that a new life course stage entitled 'emergent adulthood,' has emerged (Arnett, 2000; Arnett, 2015). This stage is characterised by a delay in young people making independent decisions and consequently accepting responsibility for themselves. During this stage, young adults can explore different life directions without commitment (Kins et al, 2009). It is argued that this stage has come as a result of cultural constructs whereby it is no longer the norm for young adulthood to be a time in which it is expected to settle into long-term adult roles (Arnett, 2000; Kins et al, 2009).

This fluidity in the life course transition between adolescence and adulthood has also meant that returning to the parental home after a period of time away has become more widespread. Such returns have been coined in the literature as 'boomeranging,' a concept which refers to the return mobility of young adults moving to and from the parental home (Kaplan, 2009; Stone et al., 2013). Young adults who return to the parental household after leaving are often referred to in the literature as 'boomerang children.' Scholars have long attempted to research the reasons for this so-called boomeranging with the main factors including; the conclusion of higher education, negative shocks such as unemployment and partnership dissolution and increasing housing market instability (Olofsson et al., 2020; Wu &

Grundy, 2023). It is argued that the decision to undergo a return to the parental home is often heavily influenced by increasing housing costs and precarious labour market conditions. Returning to the parental home is largely seen as a response to an undesirable situation (Albertini & Kohli, 2012; Arundel & Lennartz, 2017). A return to the parental home can act as a protection against labour and housing market instability for a young adult and indicates a good parent-child relationship in which emotional and financial support is exchanged (Kaplan, 2012; Lewis et al., 2016). Nonetheless, such a move is often viewed throughout the literature as a failure (Pickhardt, 2011). In which potential repercussions for the well-being of the young adult and the parents as well as for the parental financial situation can be observed (Lewis et al., 2016; Tosi and Grundy, 2018). The inability for a young adult to sustain themselves outside of the parental home points to broader societal issues in which young adults are often burdened by student debts, high unemployment rates and increased housing and living costs (Abetz, 2021).

In addition, it is widely acknowledged that the characteristics of the parents can also have an impact on the likelihood of returning (Van den Berg et al., 2018). This acknowledgement stems from the feathered nest hypothesis, put forward by Avery et al (1992). This hypothesis centres around the idea that greater parental resources are associated with an increased likelihood of a young adult returning to the parental home. The parental influence on the chances of becoming a boomerang child is threefold. Firstly, the social relationship between the young adult and the parents is important. The effect of family structure is widely documented across the literature with those who come from a two-parent family structure more likely to leave at a later age but also return (Aquilino, 1991; Raab, 2017; Sandberg-Thoma et al., 2015). Having a good relationship in which social resources and support can be exchanged proves to be an important predictor of the decision to return (Bernhardt et al., 2005; South and Lei, 2015). Secondly, the financial resources of the parents have also been acknowledged as a key part of the decision-making process of returning to the parental home (Avery et al., 1992). The socio-economic position of the parents and the subsequent greater resources they have makes living in the parental home more attractive for a young adult. Lastly, in line with the feathered nest hypothesis, the housing situation of the parents is also important when considering the pull factors for returning to the parental home. The housing situation of the parents is understudied in the literature, especially with regards to its influence on returning. However, it is expected that the housing tenure and the size of the living space of the parental home are potentially important influencers on the likelihood of undertaking a boomerang migration.

1.1 Research Question

Consequently, this study focuses on gaining a better understanding of the relationship between a feathered nest and its subsequent impact on the likelihood of a young adult returning to the parental home. Due to the lack of previous research on the role of housing in the decision-making process of young adults, this study pays a particular focus to that, alongside the financial situation of the parents and the household structure. Additionally, a smaller focus is placed on the characteristics of the individuals that return to the parental home. The research question is as follows; *'What role does a feathered nest play in the return process to the parental home for young adults in the Netherlands?'* To aid in the answering of the research question, three sub questions have also been formulated;

1. How does parental income impact the likelihood of a young adult returning to the parental home?

2. How does the housing tenure and size of the living space of the parental home influence the likelihood of a young adult returning to the parental home?

3. How does the structure of the parental household impact the likelihood of a young adult undertaking a boomerang migration?

In order to answer these research questions, register data provided by Statistics Netherlands is used. This data contains a wealth of information regarding a number of demographic characteristics of the Dutch population such as residential, family, educational and employment situations. The use of register data provides a unique insight into the feathered nest due to its inclusion of detailed information on all young adults in the Netherlands and their parents. The observation period for this study is 2012-2020 with individuals aged 17-35 observed. This time period was chosen as the most up-to-date and relevant information was available for this time frame. The decision to observe individuals aged 17-35 was made due to the lack of boomerang mobility observed outside of this age range. The main method of analysis employed in this study is an event history analysis due to the nature of the data being in person-years.

This study aims to fill the gap in the academic literature whereby the feathered nest hypothesis is largely unexplored with regard to returning to the parental home. Previous research has mainly focused on the influence of parental resources on the likelihood of leaving (Avery et al., 1992; Van den Berg et al., 2018). Nevertheless, it is acknowledged that parental characteristics have the potential to have a major impact on the decision to return and therefore it is a focal point of this research. This study aims to make a second contribution to the literature through the focus on the housing situation of the parents and its relationship with the likelihood of a young adult returning. In particular, the analysis of the housing situation proves to be poignant societally as access to the housing market and residential independence has become increasingly difficult for young people in the Netherlands in recent years. The lack of suitable long-term accommodation for young adults has the potential to both increase the likelihood of staying in the parental home until a later age whilst also increasing the likelihood of returning to the parental home. The precariousness of the housing market and how young people are interacting with it is also an important topic for policymakers and those creating housing infrastructure. Overall, this research aims to provide a unique perspective of boomerang children in the Netherlands and their interaction with a feathered nest using register data.

2. Theoretical & Research Background

2.1 The Process of Leaving the Parental Home

In order to adequately examine the process of returning to the parental home for young adults, it is important to understand the role leaving home plays. Additionally, an exploration is needed into how the motivations for leaving home alongside the situation surrounding the move are largely intertwined with the subsequent inclinations to return. Scholars have long portrayed leaving home as one of the most important markers of the transition to adulthood (Mulder, 2009; Egondi et al., 2013; Gillespie, 2020). In which young adults experience a number of developmental changes that shape their future lives (Lloyd, 2005). Motivations for leaving the parental home are examined across the literature with the notion of gaining independence particularly residential independence regularly considered to be the key reason for making such a move (Goldscheider & Goldscheider, 1993; Mulder & Clark, 2000; Koc, 2007; Stone et al., 2013). Research by Gierveld, Liefbroer & Beekink (1991) provided one of the first overviews into leaving home patterns in which they established three motivations for exiting the parental home; to live with a partner, to pursue educational or employment opportunities and to gain

independence. Subsequent research has continued to proclaim these three reasons as the key motivations for young adults to exit the parental home. Nevertheless, in recent times, the process of leaving home has become more complex and protracted with the timing of the move fluctuating (Billari and Liefbroer, 2010). This can be largely attributed to changing societal expectations surrounding living in and leaving the parental home in which it has become socially acceptable to stay in the parental home until later ages (Billari & Liefbroer, 2007; Aassve et al., 2013; Tosi, 2017). In the Dutch context, an individualistic approach to the transition to adulthood is observed in which young adults have greater autonomy in the decision-making process (Lesthaeghe, 2010). In the transition to adulthood, young Dutch adults tend to experiment with relationships and freedom of movement before they engage in long-term commitments, with the postponement of marriage and parenthood common (Billari & Liefbroer, 2010).

2.2 The Process of Returning to the Parental Home

The heterogeneous nature of the departure from the parental home alongside the differing reasons and contexts in which a move takes place has the potential to greatly influence the chances of returning. Scholars now suggest that the transition to adulthood has become reversible whereby individuals return to the parental home after a period of independent living (Houle & Warner, 2017; Gillespie, 2020). This reversibility in the transition to adulthood is largely characterised and determined by the social context in which the young adult lives. Research from Wu & Grundy (2023) highlights how intergenerational coresidence has become increasingly common in recent decades. It is argued that this trend can be attributed to decreasing job prospects, financial instability, increasing housing costs and extended education alongside postponement of marriage and parenthood (Newman & Aptekar, 2007; South & Lei, 2015; Mazurik et al., 2020). Not only do these factors play a role in increasing the age at which an individual exits the parental home but they also influence any subsequent boomerang moves (Mitchell, 1998; Stone et al., 2013; Van den Berg et al., 2019). Consequently, the literature outlines a clear relationship between leaving the parental home and returning, with both being largely affected by social and economic contexts as well as life course trajectories (Wu & Grundy, 2023). The connection between the life course and the process of returning to the parental home is widely acknowledged with the idea that prior transitions have the ability to display consequences for later transitions (Goldscheider et al., 1999; Van den Berg et al., 2018). A boomerang move is widely considered to be a change in the trajectory of the life course usually caused by a turning point (Elder, 1998; Van den Berg et al.,

2018; Warner and Houle, 2017; Gillespie, 2020; Wu & Grundy, 2023). Examples of turning points include the completion of higher education, partnership dissolution and loss of employment (DaVanzo & Goldscheider, 1990; Stone et al., 2013; Sandberg-Thoma et al., 2015).

Returning to the parental home after a period of autonomous living, often coined a boomerang move, has become more prominent in the literature in recent years. Research from Van den Berg et al (2019) argues that as pathways out of the parental home have diversified, it has become increasingly common for young adults to return. A growing body of literature claims that boomeranging behaviour amongst young adults has been increasing and subsequently has been growing in importance as a research topic (Stone et al., 2013; South & Lei, 2015; Arundel & Ronald, 2016). Research surrounding returning to the parental home identifies both the positive and negative aspects of such a move. Many scholars distinguish a return to the parental home as a failure in which a young adult becomes a burden to their parents and relies on them for economic and emotional support (Pickhardt, 2011; South & Lei, 2015; Van den Berg et al., 2019; Olofsson et al., 2020). On the contrary, a return to the parental home can also be viewed in a more positive light in which the parental home acts as a safety net for young adults in a time of need through the exchange of financial and emotional support (Kaplan, 2012; Lewis et al., 2016; Van den Berg et al., 2019). The context in which boomeranging occurs is also important and acts as a decisive factor in how the return is received. In the Dutch context, leaving the parental home is viewed as an expression of independence and any loss of that is usually met with a negative reception by both the young adult and the parents (Kleinepier & de Valk, 2017). Generally, Western and Nordic countries tend to place high value on self-achievement and autonomy. Whereas Southern and Eastern European countries are characterised by more conservative family attitudes with family interdependence and traditional roles prominent (Reher, 1998; Duncan & Pfau-Effinger, 2012; Jappens & Van Bavel, 2012; Inglehart, 2015). Thus, the way in which a move to the parental home is viewed is largely dependent on the reason for the move. Goldscheider & Goldscheider (1999) highlight how students regularly return to the parental home upon the conclusion of their education and therefore such a return is largely accepted by both the parents and wider society. On the contrary, returns that take place as a result of precarious working and housing conditions alongside the breakdown of a partnership are more likely to be viewed as a failure. These returns are generally characterised as a reversal in both the transition to adulthood and the life course and have the potential to negatively impact the well-being of both the parents and the young adult (Tosi, 2020; Wu & Grundy, 2023).

3. Theoretical Framework

3.1 Feathered Nest Hypothesis

The Feathered Nest hypothesis in relation to the parental home was introduced by Avery, Goldscheider & Speare in 1992. This hypothesis explored the role a so-called feathered nest played in the process of leaving home for young adults in the United States. At its core the feathered nest centres around the idea that the parental home provides a place of comfort and a nurturing environment for a young adult and is feathered with financial and emotional support. Initially put forward from a sociological standpoint by Featherman & Lerner (1985) the hypothesis explores how the parental home provides a place where emotional support and financial resources are exchanged and where opportunities for personal growth foster subsequent life choices. In terms of returning to the parental home, a feathered nest provides stability and a place of refuge for young adults as they renavigate the life course and aim for independent living.

In the case of Avery et al's (1992) paper, they depict that individuals that come from more affluent families have greater access to both financial resources and support and subsequently they often delay the timing of leaving the parental home. Generally speaking, the feathered nest hypothesis posits that young adults have the opportunity to stay in the parental home for an extended period due to the financial safety net of their parents' income. Avery et al (1992) recognised the changing landscape surrounding the process of leaving home and aimed to identify whether greater parental resources acted as a reason to stay or rather a facilitator of leaving. Mainly focusing on parental income and using data from the 1984 US Survey of Income and Programme Participation, two different pathways of exiting the parental home were identified; marriage and unmarried residential independence. They acknowledged that each life course event responded differently to family influences. Higher parental income strongly deterred nest leaving via marriage whilst also increasing the age at which an individual leaves home. It was also found that age played an important role with parental income playing a larger role in younger adults' nest-leaving process as opposed to older adults.

An interesting juxtaposition was also outlined through the incorporation of the feathered nest versus the gilded cage debate. The Gilded Cage hypothesis centres around the idea that individuals from more affluent families are more likely to leave home at an earlier age due to the opportunities and resources afforded to them by their parents' income. In this scenario, young adults are granted greater opportunities for gaining independence and experiencing residential mobility which allows them to establish themselves outside of the parental home. These contrasting hypotheses provide an interesting framework that can also be applicable to the returning home process. Higher parental income and resources can encourage a return to the parental home however it can also act as a safety net and support system outside of the parental home in times of negative shocks. Additionally, the ability for intergenerational coresidence to provide companionship, economies of scale and the monitoring of behaviour were acknowledged with such provisions also applicable to the return process (Avery et al., 1992). Subsequently, this theoretical approach provides a good example of the affiliation between the reasons behind leaving the parental home and also returning and therefore provides the main theoretical basis of this study.

In recent years, some scholars have aimed to build on this theoretical approach by Avery et al (1992) by examining the role of a feathered nest in a number of different scenarios. Van den Berg et al (2018) examined the role of family structure in mediating early home leaving in which they acknowledged the role a feathered nest plays during this process. Using data from the German Socio-Economic Panel Study, it was recognised that the parental home could be feathered in terms of economic, social and community resources and any feathering would influence the age of leaving home. Through the incorporation of the feathered nest theoretical framework in this study, three key aspects of the parental home and household are identified for exploration.

3.2 Financial Situation of the Parents

Firstly, the financial situation of the parents is identified as a predictor of the return process. It is believed that through increased financial resources of the parents, returning children will be less of a financial burden, with the parents able to support them economically inside the parental home. Research from Van den Berg et al (2018) highlights how parents with lower incomes have less ability to support their children in coresidence and subsequently become affected by the economic burden of the young adult. When leaving the parental home,

young adults can be particularly susceptible to experiencing financial difficulties as they navigate their new found financial independence. Consequently, returns are often seen in times of economic hardship. Parents with high incomes are more equipped to deal with the return of an adult child as young adults feel that they will not negatively impact their parents' financial status. Previous research surrounding the economic challenges that come with independent living suggests that adverse economic circumstances act as a trigger for a return as young adults realise the economic burden of living alone (Sandberg-Thoma et al., 2015; Van den Berg et al., 2018). In this scenario, a return to the parental home helps dissolve any monetary burdens and pressures and allows them to make ends meet (Gee et al., 1995; Matsudaira, 2016; Stone et al., 2013; Arundel & Lennartz, 2017).

The financial resources of the parents highlight the two-fold nature of the feathered nest hypothesis. One could argue that greater parental financial resources increase the likelihood of a return due to the ability of the parents to support their children in the parental home. Research from Ermisch (1999) highlights how parental income can act as a proxy for wider material resources including the provision of reduced cost or even free accommodation in the parental home. However, it could also be argued that greater financial resources have the opposite effect in that it allows parents to support their children as they navigate independent living outside of the parental home (Olofsson et al., 2020). Consequently, the reasoning for the return becomes of utmost importance and it is often seen that economic adversity and reversals in the life course motivate return mobility in young adults (Albertini & Kohli, 2012; Arundel & Lennartz, 2017). Parents with a stable income and in a financially secure situation have the ability to offer young adults a place of refuge in which they can renavigate the life course in times of economic instability (DaVanzo & Goldscheider, 1990; Stone et al., 2013; Sandberg-Thoma et al., 2015; South & Lei, 2015; Wu & Grundy, 2023). Using the feathered nest hypothesis and the subsequent findings from the literature, a hypothesis has been formulated;

Hypothesis 1 - The greater the financial resources of the parents the higher the likelihood of a young adult returning to the parental home.

3.3 Housing Situation of the Parents

Secondly, using the feathered nest hypothesis, the potential for the housing situation of the parents to play a role in the returning home process is established. The examination of the parental home in terms of the housing tenure and the available living space is lacking across the literature, particularly with regards to boomeranging. Nevertheless, one can deduce that a feathered nest in terms of housing situation would encompass an owner-occupied parental home with a large amount of available living space. Homeownership mitigates the financial responsibilities that come with privately rented homes. Less of the parental income is going towards housing and therefore they are more likely to be able to support an adult child in the parental home. Homeownership provides a sense of stability and long-term security that is often not found with privately and socially rented homes in which uncertain rental contracts can deter boomeranging. Ownership of a home also alleviates the instabilities associated with times of economic hardship. Even in times of economic recession, the parents have an increased likelihood of not being overly burdened by adult children in the parental home. Additionally, owner-occupied homes tend to be associated with higher quality housing which in turn provides a more enticing place for a young adult to return to. Poor housing conditions and quality are known associates of early home leaving and in turn act as a deterrent to boomerang mobility (Buck and Scott, 1993; Mulder et al., 2002).

The size of the parental home also has the potential to be particularly important with an increased living space associated with more opportunities for privacy for the young adult. In cases of shared housing arrangements either through co-living or multi-generational households, one would anticipate that a young adult would be less willing to return as there would be no guarantee of having their own private space. Decreased living space is often associated with the sharing of bedrooms and a lack of space for independent study and work alongside a lack of privacy. Moving from a period of independent living to a parental home with a small living space seems unlikely for a young adult. Research from Van den Berg et al (2018) highlights how good housing conditions with large amounts of space increase the quality of life in the parental home. More privacy for example having their own bedroom and bathroom is afforded to the young adult. Across the literature, poor housing conditions are largely associated with early home leaving and subsequently are linked with a lower likelihood of returning (Buck & Scott, 1993; Mulder et al., 2002). In the cases where a young adult is returning to the parental home as a result of

partnership dissolution, the living space becomes particularly important especially if they also bring children with them. When examining the housing situation of the parents, it is important to consider the increasing difficulties young people are facing in accessing the housing market. Consequently, the instability in finding suitable and affordable housing could lead to an increased likelihood of returning to the parental home (Stone et al., 2011; Stone et al., 2013). Through the implementation of the feathered nest hypothesis and the literature, a second hypothesis which aims to deduce the potential for a relationship between the housing situation of the parents and the return process has been formulated;

Hypothesis 2 - Young adults with a parental home that is owned by the parents and has a large living space have a higher likelihood of returning to the parental home.

3. 4 Family Structure

The social relationship between the parents and the young adult is another manifestation of the feathered nest hypothesis whereby the parental home is feathered with two parents that offer emotional support and a good parent/child relationship. In this case, the feathered nest theory posits that young adults from one-parent families have lower social, economic & community resources and subsequently are likely to leave the parental home at an earlier age and are less likely to return (Van den Berg et al., 2018). Many scholars identify the importance of family structure particularly in negating early home leaving (Aquilino, 1991; Goldscheider & Goldscheider, 1998; Sandberg-Thoma et al., 2015; Raab, 2017; Van den Berg et al., 2018). Generally, a two-parent family is associated with notions of stability and the ability to provide emotional support to a young adult in times of negative shocks and life course reversals. A two-parent family is associated with good quality parent/child relationships which enhances feelings of belonging and attachment between the young adult and the parental home. One- parent families also have the potential to change the normative and cultural structures that the young adult develops within. This leaves them to have different patterns of union formation and educational attainment typically characterised by earlier marriage and educational dropout (Amato, 2001; Ivanova et al., 2011). Additionally, family structure is a known determinant of the timing of leaving the parental home, with individuals from one-parent families more likely to leave home at an earlier age (Goldscheider & Goldscheider, 1998;

Sandberg-Thoma et al., 2015; Raab, 2017; Van den Berg et al., 2018; Herzig, 2019). The transition of leaving home and its interconnectedness with the return process means family structure proves to be an important predictor of both. New family structures including the presence of a new partner for the mother or father in the parental home have the potential to foster some tension and make a return less appealing for a young adult. Previous research outlines how the presence of a step-parent or new partner in the parental home can often disrupt social relations as a child has to adjust to a new family structure (McLanahan & Sandefur, 1994; Sweeney, 2007; King, 2009).

It is also important to note that the notion of a non-intact family does not just have the potential to impact the relationship between a parent and a child but also the financial support that the parents can offer the young adult. Previous research has found disparities between social resources exchanged in two-parent families as compared to single-parent families and stepfamilies. These disparities are largely observed in the quality of the relationship and the availability of emotional support. Research by Afifi & Schrodt (2003) surrounding the impact of divorced households on children outlined that children from non-intact families displayed a less close relationship with their parents. Whilst Ressler et al's (2017) research on mother's union statuses and children's schooling in the US suggested that children from one-parent families received less support in school compared to those from intact families. Likewise, children from so-called broken families were less likely to regard their parents as a source of support and help (Amato et al., 1995; Kalmijn and Dronkers, 2015). Generally, single-parent families can often be characterised by financial difficulties leading to a lower likelihood of a young adult both wanting to and being capable of returning (Uunk, 2004; Andreß et al., 2006; Dewilde & Stier, 2014).

Through the incorporation of the feathered nest and family structure theoretical standpoints some characteristics of the parents are identified as determinants of the return process. Family structure constitutes a key characteristic whereby a family structure other than intact is associated with a decreased likelihood of returning to the parental home. The distance between the young adults' residence and the parental home is also established as a predictor of boomerang mobility. Larger distances between the parental home and the young adult would likely deter boomerang mobility due to the associated costs of the return. Previous research has identified that long distances can act as a deterrent to migration due to the economic, social and psychological costs alongside the loss of social

ties they have developed in their new neighbourhood (Gillespie & Lei Lei, 2020). Additionally, an association between geographical proximity and the quality of the parent-child relationship is observed as a large distance is associated with a lower quality relationship (Leopold et al., 2012). The ability to regularly visit the parental home when living a short distance away decreases the need to return to ensure the quality of the relationship is not diminished. Furthermore, it is argued that short distance moves have a greater likelihood of being associated with the quest for autonomy rather than out of necessity and subsequently returns over short distances are less likely to be observed.

The age difference between a young adult and their parents has the potential to influence mobility patterns, with large age differences impacting in two ways. Firstly, a large age gap may decrease the likelihood of returning as the return of an adult child may be a bigger burden for older parents who may have retired and subsequently be less financially equipped. On the other hand, larger age gaps may mean young adults return to help their parents in their old age and provide support and caregiving to them rather than vice versa, something more likely to be observed in older young adults. Lending into the capability for parents to receive adult children in their home is the examination of the number of children already present. A twofold nature of the presence of siblings is observed; on the one hand in the case of strong family ties, the presence of siblings acts as an encouraging factor for a return. Extra household members increase the number of individuals exchanging both resources and support with the presence of siblings often increasing the benefits of living in the parental home (De Falco et al., 2023). Nevertheless, the presence of siblings in the parental home often acts as a deterrent of returning due to the associated parental resource dilution alongside the privacy costs associated with co–residence (Becker, 1973; De Falco et al., 2023). Overall, a third and final hypothesis has been developed which assesses the structure of the parental household and the number of children living in the parental home on the likelihood of returning which is as follows;

Hypothesis 3 - Young adults that come from a two-parent household structure containing other siblings have a higher likelihood of experiencing a boomerang migration.

3.5 Individual Characteristics and the Location of the Parental Home

Through the implementation of the feathered nest hypothesis framework, the importance of a number of characteristics of the individual in the return process becomes evident. The identification of a relationship between a number of demographic characteristics namely age, sex, ethnicity, marital status and educational attainment on the likelihood of returning is widely acknowledged across the literature. Consequently, the need to implement these as control variables in the empirical analysis became apparent. Gender differences in boomeranging behaviour are widely documented with the literature suggesting that being male and younger is associated with a higher risk of returning home (Stone et al., 2013; South and Lei, 2015; Mulder et al., 2020). Nevertheless, a study using data from the US National Longitudinal Survey of Youth which focused on the role of parent-child relationships and returning home found that for daughters, boomeranging was positively associated with the closeness of the parent-child relationship (Gillespie, 2020). Studies in both the US and Italy have identified gender differences in the likelihood of returning post union dissolution with males more likely to return, with females especially with children more likely to stay in the marital home (Ongaro et al., 2009; Berrington et al., 2013). Studies also highlight the presence of gender differences in the influence of parental resources with women often more influenced by parental occupational status and are more likely to be affected by changes in both the family structure and atmosphere (Buck & Scott, 1993; Goldscheider & Goldscheider, 1999; Blaauboer & Mulder, 2009). On the contrary, other research has found men to display differing relationships in the presence of a single mother and experience different family related conflicts and tension compared to women (Aquilino, 1991; Blaauboer & Mulder, 2009). Societal norms and structures also have the potential to influence returning to the parental home differently for each gender. In some societies, it may be more acceptable for women to return as research has suggested parents tend to monitor and supervise their daughters more closely than their sons (Mitchell, 2004).

Likewise, the literature identifies the potential for age differences in the likelihood of returning to the parental home. As the completion of higher education is a well known trigger of a boomerang move, it is no surprise that students are one of the groups that return the most (Goldscheider & Goldscheider, 1998). The age at which an individual leaves the parental home is a known predictor of the age of returning with those exiting the parental home at an early age more likely to return (Billette et al., 2011; Kleinepier & de Valk, 2017; Berngruber, 2015).

One could anticipate age differences manifesting as a result of the trigger for returning. For instance, those who return due to unemployment or partnership dissolution are likely to be older than those who return due to initial challenges with independent living alongside completion of higher education.

Additionally, cultural differences and the norms and structures they produce are known determinants of the returning home process. The decision to both exit and return to the parental home is widely described as a preference of both the young adult and their parents and largely varies across cultural groups (de Valk & Liefbroer, 2007a; Aassve et al., 2013; Kleinepier & de Valk, 2017). Research from Arundel and Ronald (2016) outlines how individuals living in more family oriented societies for example Southern European countries display differing propensities in terms of boomerang behaviour. Cultural and family backgrounds that differ amongst ethnic groups are likely to influence boomeranging behaviour with some cultures and countries placing a high value on self achievement and independence. This is particularly found in Nordic and Western countries, whereas Southern European countries are more associated with family based values and traditional roles including intergenerational coresidence (Reher, 1998; Duncan & Pfau-Effinger, 2012; Jappens & Van Bavel, 2012; Inglehart, 2015). Research surrounding ethnic differences in boomeranging identifies the role of immigration status, social and family roles and attitudes towards marriage and family plays in returning to the parental home (Glick & Van Hook, 2002; Treas & Batalova, 2011; Britton, 2013). In the Dutch context, research from Kleinepier & de Valk (2017) identified disparities in the leaving home process between Dutch natives and Turkish and Moroccan migrants. Young adults from migrant backgrounds find themselves in a unique situation whereby they are forced to balance the norms and values of their parents with that of the society in which they grew up. Consequently, boomeranging propensities are often seen to differ between migrant and non-migrant groups with the latter more likely to return (de Valk & Billari, 2007; Lei & South, 2016).

Cohabitation and marriage constitute two key reasons for a young adult leaving the parental home. Similarly, the marital status of an individual and any changes in this is acknowledged as a trigger of a potential return. Single individuals display the highest tendency of returning due to the lack of social ties associated with not having a partner. Cohabitation and marriage bring about certain responsibilities that are not easily dropped and subsequently returns for people in these categories are not often observed. Nevertheless, a change in marital status

and union dissolution are well documented triggers of return behaviour (Stone et al., 2013; Gillespie, 2020). Union dissolution often leaves one or more of the couple seeking a new household and additionally seeking emotional support in the parental home.

Moreover, educational attainment is a known predictor of a young adult's ability to live independently and self-sufficiently outside of the parental home. Lower levels of and dropping out of education tend to increase the likelihood of needing to return to the parental home whilst higher educational attainments are usually associated with an increased ability to remain stable independently (Kaplan, 2012; Wiemers, 2014). Research from Houle & Warner (2017) outlined how individuals who did not complete a college education were met with an increased risk of returning to the parental home. Additionally, completing higher education constitutes differing outcomes for the living arrangements of a young adult with the uncertainty and student debt burden placed on graduates often encouraging them to complete a boomerang move. In some instances, individuals who graduate from higher education display high levels of independence and therefore usually are unlikely to want to return to the parental home. Nevertheless, completion of education can leave young adults in uncertain situations and sometimes the safety net of the parental home proves to be most appealing (Stone et al., 2013; South & Lei, 2015).

Furthermore, a need to consider the potential for individual level characteristics to influence the association between various parental attributes and boomeranging arises. In particular, the identification of the relationship between the income of the individual and the likelihood of returning is noted. At the individual level economic factors such as employment status, student debt and poverty level have been recognised as drivers of boomerang migration (Houle & Warner, 2017; Dettling & Hsu, 2018; Bleemer et al., 2021). It is widely acknowledged that young adults often return to their parental home in times of economic adversity and inability to maintain financial independence. Consequently, the income of a young adult is a known predictor of boomerang mobility with higher income levels decreasing the likelihood of returning (Kaplan, 2012; Matsudaia, 2016). Likewise, the economic activity status of the individual is influential with unemployment a known trigger of return mobility (Mykyta & Macartney, 2012; Dettling & Hsu, 2018). A differential between boomerang propensities amongst individuals in paid employment and those who are inactive or receiving a form of welfare benefits is observed with paid work associated with the ability to be self sufficient outside of the parental home. Similarly, a change in

employment status often encourages a boomerang migration as young adults seek economic stability in the parental home (Stone et al., 2013; Matsudaira, 2016; Kleinepier & de Valk, 2017; Arundel & Lennartz, 2017). Increasing precarity in the labour and housing market alongside the increased cost of living and burden of student debt placed on young adults leads to both higher tendencies for boomerang and intergenerational coresidence.

In line with the feathered nest hypothesis, the characteristics of the individual's home prove to be equally influential in the return process. Young adults who are homeowners display a decreased likelihood of returning to the parental home as homeownership is associated with high levels of financial and social independence. However, home owning in this age category is not common and therefore many young adults are met with residential insecurity as social or private renting with shared living is typical. As young adults struggle to access the housing market, they can often be met with inflexible and expensive residential options and subsequently often seek comfort and stability in the parental home. Here, the importance of the living space is also recognised with smaller living spaces associated with a lack of privacy and overall poorer wellbeing encouraging a return to the parental home. Disruption to living and housing situations is a known driver of boomeranging (Albertini & Kohli, 2012; Arundel & Lennartz, 2017).

Moreover, the location of both the parental home and the individual's home is an important boomerang predictor, particularly its urbanity and labour market area. For young adults, one would conclude that more urban areas, which are usually in core labour market areas, are more appealing due to the employment opportunities and amenities they provide. Parental homes located in very rural areas or peripheral labour market areas are unlikely to appeal to a young adult, particularly in situations of unemployment or education completion. Increased urbanity and core labour market areas are often associated with better social opportunities, employment prospects as well as educational institutions. Previous research outlines urban areas as places that foster openness, diversity and tolerance making them more attractive to young adults (Florida, 2002; van Diepen & Musterd, 2009).

3.6 Conceptual Framework

The conceptual framework below is a deductive framework, which has been created using the existing literature and theories presented in the earlier chapters. The model provides a summary of the theoretical framework employed in this research.

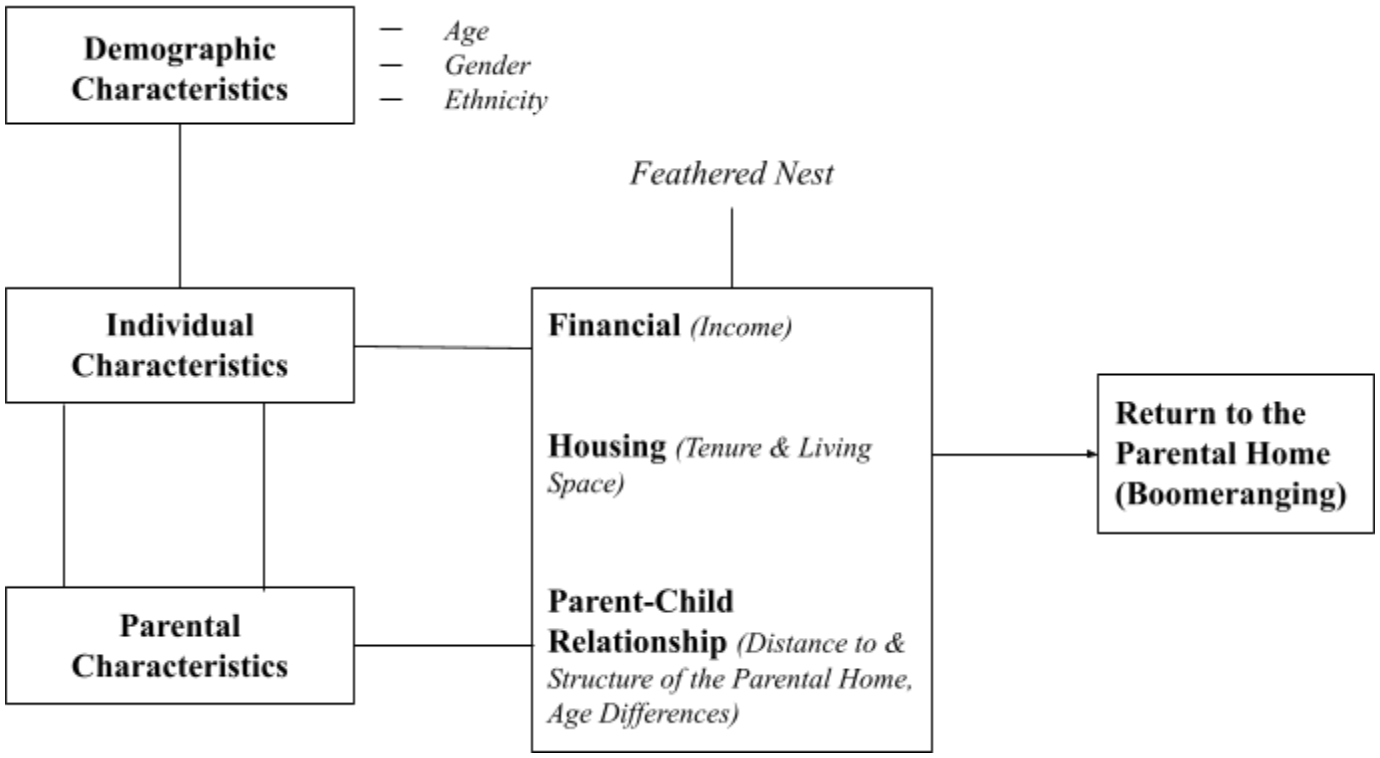

Figure One: Conceptual Framework (created by author)

4. Methodology

4.1 Data & Study Site

As the study site for this research is the Netherlands, the main source of data is Dutch register data provided by Statistics Netherlands. This data was compiled using the digitised Municipal Personal Records Database (Prins, 2017). Much of the data collected and analysed by Statistics Netherlands is obtained from registers from other authorities such as the Personal Records Database, the Tax & Customs Administration, the Employee Insurance Agency as well as the National Police & Social Insurance Bank. Through collecting data at the beginning of each calendar year and additionally, when an individual undergoes a demographic event, the Statistics Netherlands

database contains a wealth of data on the Dutch population. Including information on a number of demographic characteristics such as residential, family, educational and employment situations and therefore is appropriate for use in this research (Prins, 2017). Register-based data are particularly beneficial due to the continuous nature of data collection in which up-to-date information is readily available (Guy-Peters, 2016). Additionally, register data allows for the inclusion of all individuals in the study. For example, the relocation of a young adult does not hinder register data whereas often this can cause them to drop out of panel studies. Similarly, in the use of surveys, non-participation is an option. However, register data provides information on everyone. Moreover, register data provides information on the parents of the individual independent of the child's information, something that is often not found through the use of other data collection methods. As this study aims to analyse and explore boomeranging behaviour, the use of register data is appropriate due to its longitudinal nature and ability to allow for analysis of trends and changes over time.

Nevertheless, it should be noted that the use of register data in this study was not without shortcomings. Register data largely contains administrative data and therefore lacks the ability to provide information on any sort of qualitative information including individual behaviours and experiences. Through the use of register data, an accurate analysis of the parent-child relationship is not possible. Instead, using register data one can try to deduce the quality of the relationship by analysing factors such as the age gap between the young adult and the parents, alongside how far away the young adult lives from the parental home, the structure of the parental household and the number of siblings in the parental household. Additionally, register data does not provide a concrete reason for the return of the young adult to the parental home. This has the potential to be particularly important when analysing the relationship between a feathered nest and the return process. Furthermore, the upkeep of register data often relies on the promptness of reporting by the individual which can in some cases cause delays in information. However, generally, reporting is done quickly particularly with regard to residential changes due to the need for correspondence to be sent to the new address. Overall this dataset provides a wealth of longitudinal information on the Dutch population, particularly young Dutch adults with its extensive population coverage making it extremely suitable for use in this study. For this study, a dataset built by Van den Berg et al (2023) was

expanded, whereby this dataset included the necessary information surrounding the individual and parental characteristics. However, a number of relevant housing variables outlined below were added.[1]

4.2 Ethical Considerations & Positionality

It is also important to note that the use of this register data provided by Statistics Netherlands brought with it the need to assess some ethical considerations, particularly with regards to data storage. Register data can contain highly sensitive personal information and therefore safe storage of the data is of utmost importance. Access to the data used in this study was made possible through the completion of an internship at Statistics Netherlands in which the data was accessed through the online work platform and subsequently stored there. Only individuals who were authorised to access the data had the ability to and the results produced by this study have been cross-checked by the internship supervisor to ensure no personal information or individual is detectable.

Additionally, as with any research project a reflection on my position as a researcher is important. My position as a university student alongside my previous experiences as a boomerang child in my native country has the potential to cause bias in the analysis. In order to reduce any potential bias, self-reflection during the research process was important. Not letting my positionality influence the interpretation of the results and the conclusions of the study was crucial. Through reflecting on my positionality and the need to be objective rather than subjective throughout the research process both the reliability and validity of the results and conclusions were enhanced.

4.3 Study Sample

Due to the large number of observations in the dataset, a decision was made to use a random 25% sample of the population, this decision was also made by Van den Berg et al (2023) in their working paper on trends in leaving

[1] An initial preparation of the data took place in the form of the translation of each variable from Dutch to English. As a non-Dutch speaker, this time consuming process was aided by the help of Niels Kooiman (Statistics Netherlands), as he helped to translate and rename each of the important variables in the dataset, preparing the data for the analysis.

and returning to the parental home in the Netherlands. Using a sample size of 25% aided in the ease of the statistical analysis whilst still using a sample that is representative of the entire population of Dutch young adults in the period 2012-2020. Before any changes were made to the data, the number of observations with a 25% sample was 11,383,817 translating to 1,588,628 individuals aged between 14 and 35. As this is registered data, the observations are in person-years.

Firstly, some changes were made to the dataset to ensure that only those at risk of experiencing a boomerang event were observed with only those who left the parental home during the observation period included. The decision to not include individuals already living outside of the parental home before the observation period was made due to the inability to know the timing of the event of leaving the parental home. This lack of information provides an example of left censoring and has the ability to inhibit results. Likewise, as this study was only interested in the event of returning to the parental home, for the individuals that returned, the years post return were dropped from the dataset. As the main method of analysis employed in this study was an event history analysis the removal of the years post returning was a necessary step due to their inability to experience the event again.

The initial dataset provided information on all Dutch young adults aged 14-35 during the observation period. This age group was chosen as it is generally noted that boomeranging behaviour is uncommon outside of these ages. A further decision to exclude individuals aged 14-16 was made as there was a low number of individuals in this age category leaving home. Additionally, those that did leave home at aged 14-16 are considered early home leavers and generally display different returning home behaviours to those aged 17-35 which may interfere with the final results (Van den Berg et al., 2018). The initial dataset contained information for the years 2011 and 2021, however, due to some issues with missing values the years 2011 and 2021 were excluded from the dataset, leaving the final observation period from 2012-2020. Lastly, a decision was made to observe individuals for a maximum of five years post leaving the parental home, a slight tweak on the 3 year observation period post leaving employed in Van den Berg et al's (2023) paper. This decision was taken to account for those in education, as on average in the Netherlands it takes around 5 years to finish higher education and therefore observing for a maximum of 5 years provides a better chance of detecting individuals who returned post graduation. Additionally,

the Kaplan Meier Survival Estimate provided below (Figure 2) further supported the truncation of the data after 5 years as the numbers returning after that decreased with the survival curve flattening. Subsequently, the dataset now included 1,963,554 person-years with the number of individuals at 503,095. A full table containing the number of observations excluded at each stage of data preparation can be found in the appendix.

4.4 Censoring

Due to the nature of the data being in person-years, an event history analysis was the appropriate analytical method for this study. A distinctive feature of survival analysis is the occurrence of censored data in which the data may be missing or incomplete (Turkson et al., 2021). In this study, the risk period began from the moment an individual leaves the parental home. Only after exiting the parental home is an individual at risk of returning. As the risk period begins at this moment left censoring was avoided as the timing of the event of leaving is known. Individuals continue to be at risk until they either return to the parental home, the five year observation period ends or they turn 36 years old. The last two outcomes provide an example of right censoring however event history models are equipped to deal with this type of censoring. Additionally, individuals can exit the observation period in the event of moving abroad or their death. These events also provide an example of censoring in the data. Nevertheless, the implementation of an event history analysis and the avoidance of left censoring decreased the impact censored data had on the analysis.

4.5 Missing Values

With regards to missing values a decision was taken that in the case where less than 5% of the total observations for a variable had a missing value, they would be dropped from the dataset. This decision was made as dropping these values would not have a significant overall effect on the final results. This provides an example of listwise deletion which is considered to be a traditional approach in quantitative research. The 5% threshold has been chosen as the literature suggests that the benefits of multiple imputation are slim below this threshold whilst 5% missing is also considered to be the maximum upper limit for larger data sets (Schafer, 1999; Alice, 2015;

Madley-Dowd et al., 2019). A table has been included in the appendix which outlines the number of missing values per variable.

4.6 Operationalisation

4.7 Dependent variable

The dependent variable in this study is boomeranging. This binary variable was coded as 0/1 with 0 being the individual did not return to the parental home and 1 being the individual did return to the parental home in a particular year. This variable was measured by observing whether an individual was living at an address that was different from their parental home address on the 1st of January in a particular year and whether the individual had returned and subsequently re-registered at their parental home address on the 1st of April, July, October in that year or the 1st of January the following year. One drawback of this measure was that it only considers individuals who registered at their parental address upon returning; it does not account for those who returned home for a short period of time and consequently did not register at their parental residence.

4.8 Explanatory Variables

Firstly, the operationalisation of a number of variables related to both the parents of the individual and the feathered nest occurred. These variables were reconstructed to take into account the structure of the parental home on the last observation before the young adult left the parental home. For individuals who lived with both parents, only their mother or their mother and a new partner before they exited the parental home, information surrounding the mother was used. However, in the case where the individual lived with only their father or their father and a new partner before they left the parental home, information surrounding the father was used. This is a slight drawback of the study as any changes in the parental home during the observation period are not taken into consideration. Nevertheless, an analysis of this variable suggests that the majority of parental home structures remained stable throughout the observation period. Each of the variables containing parental information were measured on the 1st of January at the start of each episode (year). Subsequently, these variables contained information on the parents and parental home before a potential boomerang move. Therefore the creation of lagged variables to obtain information

before a potential return to the parental home was not necessary. Additionally, the data was cross checked to ensure that each young adult in the study had at least one alive parent or parent with a registered address in the Netherlands.

Financial Situation of the Parents

To assess the financial situation of the parents a variable which contains information on parental income was used. The creation of a parental household income variable was achieved through the use of variables which contained information on the annual gross income of the mother and the father. These variables provided the yearly income of the mother and father in percentiles alongside information on the number of individuals without income, in private households and institutions. Subsequently, these variables were recoded into five percentile categories with a sixth category entitled 'Person without income,' added. Those who were deemed to be living without income, in a private institution or private household were added to the person without income category.

Housing Tenure & Living Space Size of the Parental Home

In order to accurately assess the relationship between the parental home in terms of its physical attributes and the likelihood of returning home, a number of housing variables were added to the dataset. Firstly, a variable which identifies the housing tenure of the parental home was used which contained four categories; (1) Owner-Occupied, (2) Private Rent, (3) Social Rent & (4) Unknown. This variable was created using information on home ownership levels alongside the types of rental contracts of the parents. The inclusion of an unknown category is a minor drawback of this variable as it does not provide much useful information with regard to the feathered nest. However, it must be noted that an unknown parental housing tenure rarely occurred. Additionally, it must be noted that for the category owner-occupied, although it is known the owner lives in the dwelling, it does not specify whether the individual is the owner or just lives with the owner of the home. As the category unknown was already included in this variable, the small number of missing values were subsequently recoded into the unknown category. Secondly, the living space of the parental home in metres squared was assessed. This variable has a range of 0 to 350 and to aid the analysis it was recoded into four categories; (1) 1-100, (2) 100-140 (3) 140-200 & (4) >200.

Structure of the Parental Home

The structure of the parental household was considered through the use of a variable which initially contained five categories; (1) both parents, (2) only mother, (3) only father, (4) mother and partner and (5) father and partner. A further decision was made to recode the structure of the parental home into a binary variable which deciphered two-parent versus one-parent families with values; (1) Two Parent Family and (2) One Parent Family. To create this variable, individuals with both parents in the parental home on the last observation before leaving were recoded as 'Two Parent Family,' whilst individuals with observations in all other categories were recoded as 'One Parent Family.' The variables which indicate the age difference between the young adult and their mother and father are indicated by numerical variables. These variables provided information on the number of years between the age of the young adult and the mother and father. Both of these variables contained some unusual outliers, therefore a decision was made to only keep those who had an age difference of less than 50 years with the mother and less than 65 with the father. Subsequently, the age difference for the mother ranges from 12 to 50, whilst the age difference for the father variables ranges from 12 to 65. Secondly, a variable outlining the distance to the parental home in kilometres was applied with this variable providing values ranging from 0 to 310. Lastly, a variable which indicated the number of siblings in the parental home was employed. This variable contains 4 categories ranging from 0 children in the parental home to greater than 3 children.

4.9 Control Variables

Individual Characteristics

Firstly, the personal income of the young adult was examined, as with the parental income variable, this variable was created using information on the young adults' income in percentiles. Using this variable, the personal income of the young adult was recoded in quintiles based upon 5 percentile categories. A number of variables

which assessed the housing situation of the young adult alongside the location of both the individuals and parental home were also employed. The living space of the young adults' household was assessed. Just like the parental version of this variable, the initial values ranged from 0-350. However, the variable was recoded into four different categories to allow for a more even frequency distribution in the categories; (1) 1-80, (2) 80-110 (3) 110-140 & (4) >140. Likewise, the tenure of the young adults' home was also explored with the variable containing the same categories as the parental housing tenure variable. In the case where young adults are living in homes bought for them by their parents, they are considered to be privately renting.

Additionally, variables which provided information on the urbanity of the parental and young adults' homes were used, with these variables containing five categories; (1) Very Rural, (2) Rural, (3) Moderately Urban, (4) Urban, (5) Very Urban. These variables were created based upon the urbanity of the municipality with each municipality scored from 1-5 hence the five categories outlined above. A further decision to recode these variables into (1) Rural and (2) Urban was made. The categories of very rural and rural were recoded as rural and the categories of moderately urban, urban and very urban were recoded as urban. Although this variable provides some useful information surrounding the urbanity level of both the young adults' home and the parental home, due to their creation using variables outlining the urbanity of the municipality, accurate information on the urbanity of the household is therefore not always known. For instance, there may be a few cases in which the home is in a rural area of a very urban municipality and vice versa. Lastly, the labour market area of the parental home was also considered through the use of a categorical variable containing three outcomes; (1) Periphery, (2) Semi-Periphery & (3) Core. The forty NUTS-2 regions in the Netherlands were recoded into three differing labour market areas based on job access in the region. The creation of this occurred through the use of two variables (COROP & STEDGEM) which provide information on the region and municipality in which the household of the parents is located. Areas with low job access and opportunities were recoded into periphery regions, whilst areas with the highest availability of jobs were considered core regions. The non-inclusion of a similar variable for the residence of the young adult in this dataset proves to be a small limitation of this study in that the labour market area of the young adult is not controlled for. Such information is known by the Statistics Netherlands however a variable outlining the labour market area of the young adults' residence was not available in the dataset prepared for this research.

Some demographic characteristics of the respondents were also employed as control variables; namely age, sex and ethnicity. The age variable ranged from 17-35 and to aid in the analysis and explore the differences between age groups, the age variable was subsequently recoded into four categories: (1) 17-21, (2) 22-25, (3) 26-30 & (4) 31-35. The sex variable takes on binary 0/1 values, with 0 being male and 1 being female. The ethnic origin of the individual is also considered through a categorical ethnic group variable with the following categories; (1) Native Dutch, (2) Morocco, (3) Turkey, (4) Suriname, (5) Antilles, (6) Other-Non Western & (7) Other Western.

Additionally, the educational attainment, marital status and activity status of the young adult were also considered. Firstly, the educational attainment variable is a categorical variable with four outcomes: (1) Low, (2) Medium, (3) High & (4) Unknown. The educational level of the individual was obtained through the use of a variable (OPLNIVSOI2021AGG4HB) which outlines the highest level of education obtained by the individual with values ranging from low, to medium to high. In addition to this, a separate lagged variable which deduced whether an individual had either graduated from an educational level or dropped out of an educational level in the previous episode was created. Using these two variables a final educational level variable was created containing six categories; (1) Low, (2) Medium, (3) High, (4) Unknown, (5) Graduated in the Previous Episode and (6) Dropped out of Education in the Previous Episode. Secondly, the marital status of the individual was known through the use of the variable (TYPEVERBINTENIS), which identifies whether the individual is in a registered partnership or married. Using this variable, a marital status variable was created with three outcomes: (1) Unmarried, (2) Married and (3) Registered Partnership. Through the use of a variable which indicated whether an individual was cohabiting, a fourth category entitled ‘Cohabitation’ was added to the marital status variable. A lagged variable which identified whether an individual had become separated from a cohabitation, marriage or partnership in the previous episode was created. Those who experienced a separation in the previous episode were subsequently added to the marital status variable as a fifth category entitled, ‘Separated in the Previous Episode.’ The activity status of the young adult was also considered. An initial variable which outlined 15 different categories of socio-economic status ranging from employee, company director, self-employed, receiving a form of welfare benefits, in education and without income was recoded into four categories: (1) Paid work, (2) Welfare, (3) In Education & (4) Inactive. To assess whether an individual had left paid work in the previous episode, a new

lagged variable was created. If an individual was in paid work during one episode but was receiving welfare, in education or inactive in the next episode, they were considered to have left paid work. Individuals who left paid work were added to the activity status variable as a fifth category entitled 'Left Paid Work in the Previous Episode.' Lastly, in order to account for potential changes in the economic situation in the Netherlands throughout the observation period a final control variable entitled 'Year Left Home,' was employed in the analysis. This numerical variable contains values ranging from 2012-2019. A decision was made to exclude 2020 from this variable as individuals who left home in 2020 could not be observed returning.

4.10 Analytical Strategy

The analysis begins with the exploration of some descriptive statistics, namely through the use of a table containing summary statistics alongside a Kaplan Meier Survival Estimate. The frequency table below (Table One) provides an insight into the frequencies and percentages associated with each categorical variable alongside the mean of each numerical variable utilised in this study. A Kaplan Meier Survival estimate has also been employed which provides the probability of an individual surviving an event at each observed time point. In this case, the event is returning to the parental home whilst survival is deemed to be not returning. A survival probability is calculated by dividing the number of individuals who have not experienced the event by the total number of individuals at risk at each time interval. The probabilities are subsequently multiplied to obtain a cumulative survival estimate over time.

The explanatory analysis takes place in the form of an event history analysis namely; a discrete-time logistic regression. As the dataset provides person-year observations, this type of analytical strategy was needed. Throughout the analysis, a series of models were run to assess the different aspects of the feathered nest. Firstly, a model containing the income of the parents alongside the income of the individual was created. This model aimed to assess the role parental income played in the return process. Similarly, in order to deduce the relationship between the housing tenure of the parental home alongside the size of the living space and the likelihood of a young adult returning, a second model containing these variables was created. Thirdly, the variables which deciphered the family structure and the quality of the parent/child relationship were added to a model. A fourth

model containing all of the variables relating to the parents was created to assess the role the feathered nest as a whole plays in the return process of young adults to the parental home. It must be noted that all the above models additionally contained the exogenous control variables of sex, age and ethnicity alongside the time variable and the year of leaving home. Lastly, a final model was constructed containing all the variables employed in this study. This model forms the main basis of the results as it provides the greatest insight into the relationship between the feathered nest and boomeranging. This model contains each of the parental characteristics variables and all of the individual characteristics variables as controls. Additionally, the urbanity and the labour market area of the parental home were also added as control variables. This fifth and final model allowed for the testing of the hypotheses formulated for this research and subsequently the answering of the research question. For each of the logistic regression, the person-years format of the data meant it was necessary to cluster the standard errors by personal identification number. The results of Models 1-4 can be found in the appendix, while the fifth and final model has been included in the results section (Table 2).

5. Results

5.1 Descriptive Statistics

Table one provides summary statistics for each of the variables employed in this study. With regards to boomeranging, just over 5% of the sample experienced a return to the parental home. The dataset contains slightly more males than females whilst over 90% of the sample is aged below 30. The majority of participants are of a native Dutch origin (82.17%). Many of the individuals are unmarried with a higher percentage experiencing a cohabitation compared to marriage or a registered partnership. Almost 60% of the young adults in the dataset have an educational level higher than medium and 26.5% of the total sample are in education. The majority of individuals are in paid work (64.04%) with the highest proportion experiencing an income in the first quintile (27.7%). Surprisingly, owner-occupied is the most popular housing tenure for young adults (47.43%) with 1-80 metres squared, the most common living space size (29.44%). Unsurprisingly, the majority of young adults live in urban areas (62.41%). With regards to the parental characteristics, the majority of households experience an income in the 3rd quintile (21.44%). The majority of parental households contain two parents (74.38%) and one child (41.9%). On average young adults tend to live 18.35 kilometres away from their parental home. Furthermore, an age gap of on average 32 years for the father and 29 years for the mother is observed between the parent and the child. Almost 75% of parental homes are owner-occupied with the majority containing

a living space of 100-140 metres squared (40.96%). Additionally, the majority of parental homes are found in urban areas (65.09%) in core labour market regions (36.16%).

Table One: Descriptive Statistics Showing Frequencies and Means of Each Variable Employed in this Study

	Frequency	%
Boomerang		
No	1,402,493	94.37
Yes	83,738	5.63
Gender		
Male	753,240	50.68
Female	732,991	49.32
Time		
0	364,374	24.52
1	334,551	22.51
2	268,922	18.09
3	217,410	14.63
4	170,562	11.48
5	130,412	8.77
Year Left Home		
2012	260,822	17.55
2013	257,526	17.33
2014	243,327	16.37
2015	221,841	14.93
2016	178,251	11.99
2017	146,094	9.83
2018	106,421	7.16
2019	71,949	4.84
Age (Categories)		
17-21	369,905	24.89
22-25	517,671	34.83
26-30	469,257	31.57
31-35	129,398	8.71
Ethnic Group		
Native Dutch	1,221,206	82.17
Morocco	36,138	2.43
Turkey	38,779	2.61
Suriname	30,141	2.03

Antilles	11,066	0.74
Other Non-Western	58,407	3.93
Other Western	90,494	6.09
Marital Status		
Unmarried	948,908	63.85
Married	124,587	8.38
Registered Partnership	26,364	1.77
Coresidence	366,626	24.67
Separated in the Last Year	19,746	1.33
Educational Level		
Low	146,854	9.88
Medium	576,572	38.79
High	307,555	20.69
Unknown	23,128	1.56
Graduated in the Last Episode	322,738	21.72
Dropped out of Education in the Last Episode	109,384	7.36
Activity Status		
Paid Work	951,730	64.04
Welfare	69,996	4.71
Education	393,794	26.50
Inactive	24,371	1.64
Left Paid Work in the Last Episode	46,340	3.12
Individual Personal Income (Quintiles)		
Q1	411,702	27.70
Q2	262,423	17.66
Q3	344,463	23.18
Q4	346,980	23.35
Q5	120,663	8.12
Housing Tenure (Young Adult)		
Owner-Occupied	692,608	47.43
Private Rent	393,964	26.98
Social Rent	363,785	24.91
Unknown	9,907	0.68
Urbanity (Young Adult)		
Rural	558,603	37.59
Urban	927,628	62.41
Living Space of Household of Young Adult (Metres Squared)		
1-80	437,535	29.44

80-110	422,354	28.42
110-140	313,787	21.11
>140	312,555	21.03
Structure of Parental Household		
Two-Parent	1,105,504	74.38
One-Parent	380,727	25.62
Parental Home Living Space (Metres Squared)		
1-100	323,624	21.77
100-140	608,743	40.96
140-200	353,114	23.76
>200	200,750	13.51
Parental Home Labour Market Area		
Periphery	469,151	31.57
Semi-Periphery	479,605	32.27
Core Region	537,475	36.16
Parental Home Urbanity		
Rural	518,813	34.91
Urban	967,418	65.09
Parental Home Housing Tenure		
Owner-Occupied	1,093,660	73.59
Private Rent	75,824	5.10
Social Rent	307,314	20.68
Unknown	9,443	0.63
Parental Household Income (Quintiles)		
Q1	223,666	15.05
Q2	307,295	20.68
Q3	318,650	21.44
Q4	256,164	17.24
Q5	199,989	13.46
Person Without Income	180,467	12.14
Number of Children in Parental Household		
0	622,723	41.90
1	504,359	33.94
2	250,440	16.85
>3	108,709	7.31
	Number of Observations	**Mean**
Distance to the Parental Home	1,486,231	18.35

Age Difference (Father)	1,486,231	32.23
Age Difference (Mother)	1,486,231	29.53
Total Number of Observations (Person-Years)	1,486,231	

5.2 Kaplan Meier Survival Estimate

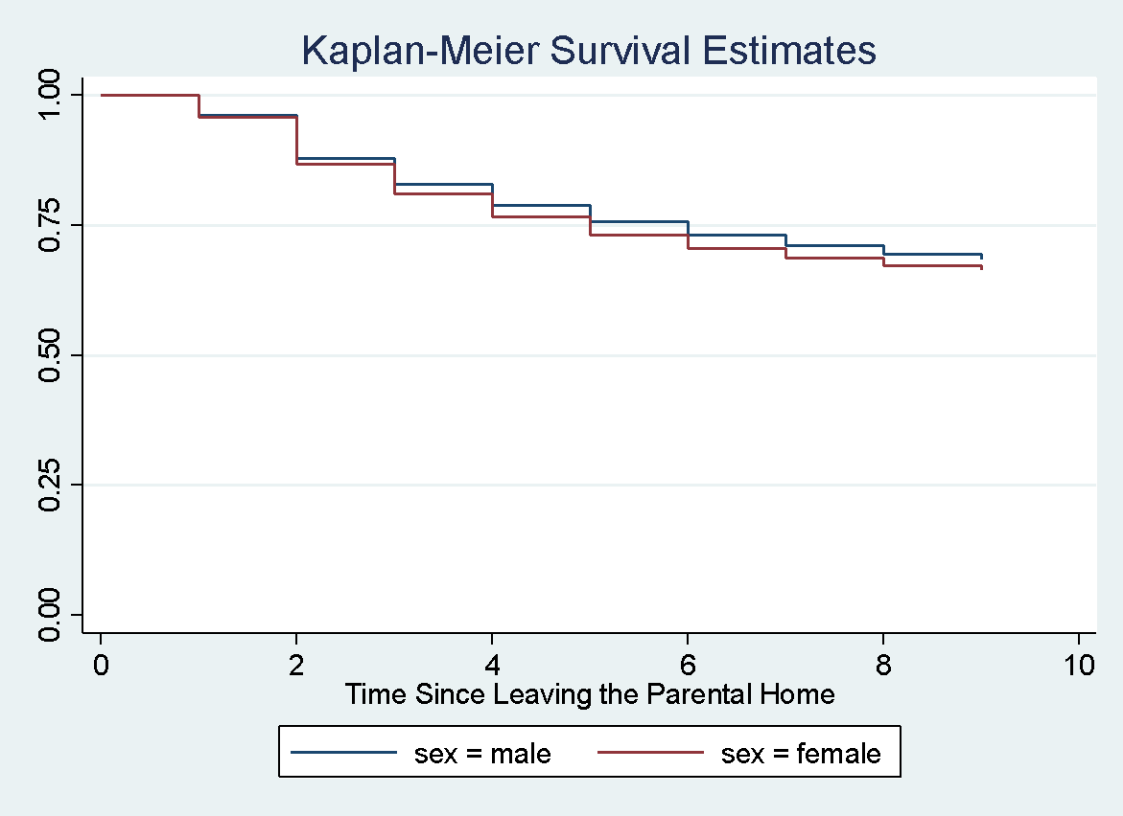

Figure Two: Kaplan Meier Survival Estimate at T = 0-9 Years

Figure two provides the Kaplan Meier Survival Estimate for the observation period with t equal to 0-9 years. The total number of subjects i.e. the population at risk, in this case, is 438,828 with 99,952 failures as this estimate is provided at the person level rather than in person-years. This figure indicates that during the initial observation period from 2012-2020, 99,952 individuals returned to their parental home. An incidence rate of around 6% is observed which outlines that during each episode, 6% of young adults living independently experience the event of returning to the parental home. The survival estimate shows that on average men are more likely to not return to the parental home than women. It is clear that the survival rate decreases yearly however a stagnation is seen around the 5^{th} year and subsequently, a decision was made to truncate the data at this point. Consequently, in the subsequent explanatory analysis, each individual was observed for a maximum of five years post leaving the parental home.

5.3 Explanatory Analysis

5.4 Feathered Nest: Parental Income

A significant relationship is found between the income of the parental home and the likelihood of a young adult returning. Individuals with a parental household in the 2nd, 3rd or 4th income quintile display higher log odds of returning as compared to those with a parental household income in Q1 ($P<0.001$). Income quintile 3 displays the highest likelihood of a return ($P<0.001$). Unsurprisingly, if the parental household is without income, the young adult has -0.059 lower log odds of returning compared to Q1, leaving individuals in this category with the lowest likelihood of returning ($P<0.001$). Additionally, individuals with parents in the highest income quintile have a lower likelihood of returning to the parental home as compared to those in Q1 ($P<0.001$). It must be noted that Q5 only becomes significantly different from Q1 when all of the parental characteristics alongside the individual income have been added to the model. A model containing the parental income and the income of the individual alongside the exogenous control variables provides no significant difference between Q1 and Q5. However, the addition of the distance to the parental home variable to the model alongside the other parental characteristics and individual income sees Q5 become significant. This result suggests that together the distance to the parental home

and the income of the individual influence the relationship between parental income and the likelihood of an individual returning to the parental home.

5.5 Feathered Nest: Housing Characteristics

An association between the housing tenure of the parental home and the odds of returning is observed whereby individuals with a privately rented parental home have 0.059 higher log odds of returning when compared with owner-occupied homes ($P<0.001$). This means that individuals with parents privately renting their household have the highest likelihood of returning. On the other hand, individuals with a socially rented parental home display the lowest likelihood of returning ($P<0.001$). An unknown parental housing tenure does not differ significantly from all other categories. It must be noted that when considering the feathered nest without controlling for any exogenous individual factors, the category of social rent does not differ significantly from owner-occupied. This result suggests that the relationship between socially rented parental households and returning to the parental home is influenced by the characteristics of the individual. Additionally, a relationship between the size of the living space of the parental home and the likelihood of returning is observed. Individuals with a parental home living space of greater than 200 metres squared display the lowest likelihood of returning ($P<0.05$). Nevertheless, the other categories do not differ significantly from each other suggesting that the influence of the size of the living space on the likelihood of returning to the parental home is small.

5.6 Feathered Nest: Family Structure

A significant relationship between family structure and the likelihood of returning to the parental home is observed whereby individuals from a one-parent family have a lower likelihood of returning ($P<0.01$). Nevertheless, it must be noted that a different relationship between family structure and returning is observed when the characteristics of the individual are not considered. In this scenario, individuals with a parental home

containing both parents display a lower likelihood of returning. Only once the educational level of the individual is considered alongside all other aspects of the feathered nest and all other individual characteristics do the results switch to a lower likelihood of returning for one-parent families. This result suggests that the education level of the individual mediates the relationship between family structure and the likelihood of a young adult returning to the parental home.

No association between the age difference between the young adult and the father is observed ($p=0.402$), whereas, a negative association is found for the age difference between the mother and the young adult. A one year increase in the age gap between the mother and child decreases the likelihood of a boomerang event by 0.012 log odds ($P<0.001$). Meanwhile, a positive association is found between the distance to the parental home and returning whereby a one kilometre increase in the distance between the young adults' residence and their parental home increases the likelihood of returning by 0.002 log odds ($P<0.001$). Lastly, individuals with one or more siblings present in the parental home experience a higher likelihood of returning as compared to individuals with no siblings in the parental home. The presence of one sibling in the parental home leaves a young adult with the highest likelihood of returning ($P<0.001$).

5.7 Individual Characteristics

A strong negative association is observed between the personal income of the young adult and the likelihood of returning. As the income level increases from Q1 to Q5 the likelihood of returning decreases for the young adult ($P<0.001$). Similarly, an association between the activity status of the young adult and the likelihood of returning is observed. Individuals receiving a form of welfare payment display the lowest likelihood of returning ($P<0.001$). Whereas, young adults who are inactive or who left paid work in the last year display a higher likelihood of returning when compared with those in paid employment ($P<0.001$). Moreover, individuals with a medium or high level of education display lower odds of returning when compared to those with a low level of education ($P<0.001$). Surprisingly individuals who graduated or dropped out of education in the last year also display a lower likelihood of returning as compared to those of a low education level ($P<0.001$). However,

dropping out of education constitutes a higher likelihood of returning compared to graduating ($P<0.01$). Overall, a high level of education constitutes the lowest likelihood of returning ($P<0.001$). Additionally, an association between the marital status of the young adult and their likelihood of becoming a boomerang child is observed. When compared with single young adults, individuals who are married, in a registered partnership or co-residence display a lower likelihood of returning ($P<0.001$). Whereas, individuals who experienced a separation in the previous year display 0.141 higher log odds of returning compared to single individuals ($P<0.001$).

Additionally, females have 0.027 lower log odds of returning to the parental home as compared to males ($P<0.001$). This result is not in line with the descriptive analysis in which the Kaplan Meier estimate suggested females return to the parental home more often than males. An exploration of this result leads to the conclusion that the feathered nest influences the likelihood of returning differently for males and females. Additionally, young adults over the age of 22 display the lowest likelihood of returning with those aged between 31-35 the least likely to experience a boomerang move ($P<0.001$). When considering the ethnicity of the young adult those who belong to an ethnic group other than non-Dutch display higher propensities of boomerang mobilities. Individuals of a Moroccan background have the highest odds of returning to the parental home ($P<0.001$). Lastly, the year in which the individual left home generally does not differ significantly from each other; however, a slightly lower likelihood of returning is observed for the years after 2017.

5.8 Individual Housing Characteristics & Location of the Young Adults and Parental Home

An association is also observed when analysing the housing tenure of the young adults' homes. Individuals who live in privately or socially rented homes or have an unknown housing tenure display a higher likelihood of returning as compared to those who live in owner-occupied homes ($P<0.001$). Unlike the parental living space variable, an association between the size of the living space of the young adults' home and returning is found. Individuals with a living space size of between 80-140 metres squared display a higher likelihood of returning when compared with those living in a home with between 1-80 metres squared of living space ($P<0.01$). Overall, individuals with a living space size of 80-110 metres squared have the highest odds of returning whilst those with a living space of between 1-80 and greater than 140 metres squared display the lowest odds of returning

(P<0.001). Through analysing the urbanity of the young adults' home one can conclude that individuals who live in urban areas have 0.049 lower log odds of returning when compared with individuals living in rural areas (P<0.001). However, no association is found between the urbanity of the parental home and the likelihood of a young adult returning (p=0.860). Finally, an association is observed between the labour market area of the parental home and the odds of a young adult experiencing a boomerang event. The results are somewhat surprising in that individuals with parents living in core regions display the lowest odds of returning (P<0.001) and parents living in semi-peripheral regions display the highest odds (P<0.001).

Table Two: Final Model Containing all Variables and Showing the Results of the Discrete Time Logistic Regression

Outcome Variable: Boomeranging	**Final Model Coefficient (Robust SE)**
Parental Household Income (Ref: Q1)	
Q2	0.039 (0.013) **
Q3	0.102 (0.012) ***
Q4	0.072 (0.013) ***
Q5	-0.055 (0.014)***
Person Without Income	-0.059 (0.015)***
Parental Housing Tenure (Ref: Owner-Occupied)	
Private Rent	0.059 (0.016)***
Social Rent	-0.064 (0.012)***
Unknown	-0.038 (0.044)
Parental Home Living Space (Ref: 1-100)	
100-140	0.004 (0.011)
140-200	0.023 (0.013)
>200	-0.040 (0.014)**
Parental Household Structure (Ref: Two Parent Family)	
One Parent Family	-0.029 (0.008)**
Number of Kids in the Parental Home (Ref: 0)	
1	0.058 (0.009)***
2	0.028 (0.012)*
3	0.035 (0.016)*
Age Difference Mother	-0.012 (0.001)***
Age Difference Father	0.001 (0.001)

Distance to the Parental Home	0.002 (0.000)***
Ethnic Group (Ref: Native Dutch)	
Morocco	0.252 (0.024)***
Turkey	0.539 (0.021)***
Suriname	0.358 (0.024)***
Antilles	0.093 (0.039)*
Other Non-Western	0.208 (0.017)***
Other Western	0.093 (0.015)***
Gender (Ref:Male)	
Female	-0.027 (0.007)***
Age Categories (Ref: 17-21)	
22-25	-0.149 (0.009)***
26-30	-0.495 (0.013)***
31-35	-0.711 (0.022)***
Year Left Home (Ref: 2012)	
2013	0.010 (0.012)
2014	-0.004 (0.012)
2015	0.031 (0.013)*
2016	0.019 (0.014)
2017	-0.038 (0.015)*
2018	-0.051 (0.016)**
2019	-0.123 (0.019)***
Years Since Leaving Parental Home (Ref: T = 0)	
1	0.928 (0.011)***
2	0.670 (0.012)***
3	0.592 (0.013)***
4	0.560 (0.016)***
5	0.447 (0.019)***
Individual Personal Income (Ref: Q1)	
Q2	
Q3	-0.119 (0.010)***
Q4	-0.464 (0.012)***
Q5	-0.806 (0.014)***
Housing Tenure Young Adult (Ref: Owner-Occupied)	-0.970 (0.023)***
Private Rent	0.317 (0.011)***
Social Rent	0.059 (0.011)***
Unknown	0.385 (0.020)***
Urbanity Young Adult (Ref: Rural)	
Urban	-0.049 (0.009)***
Living Space of Household Young Adult (Ref: 1-80)	
80-110	0.069 (0.009)***
110-140	0.046 (0.011)**
>140	0.022 (0.011)*

Parental Home Labour Market Area (Ref: Periphery)	
Semi-Periphery	0.056 (0.009)***
Core Region	-0.067 (0.009)***
Parental Home Urbanity (Ref: Rural)	
Urban	-0.002 (0.009)
Marital Status of Young Adult (Ref: Unmarried)	
Married	-1.124 (0.024)***
Registered Partnership	-0.819 (0.047)***
Cohabitation	-0.459 (0.011)***
Separated in the Last Episode	-0.141 (0.030)***
Educational Level of Young Adult (Ref: Low)	
Medium	-0.148 (0.034)***
High	-0.412 (0.033)***
Unknown	-0.444 (0.034)***
Graduated in Previous Episode	-0.408 (0.035)***
Dropped out of Education in Previous Episode	-0.365 (0.036)***
Activity Status of Young Adult (Ref: Paid Work)	
Welfare	-0.408 (0.022)***
Education	0.018 (0.016)
Inactive	0.312 (0.025)***
Left Paid Work in Previous Episode	0.085 (0.019)***
Constant	-2.156 (0.051)***
Pseudo R Squared	0.0742
N	1.486.231

*****P<0.001 **P<0.01 *P<0.05**

6. Discussion

The primary objective of this research centred around examining the potential existence of and the extent of the association between a feathered nest and the likelihood of a young adult in the Netherlands returning to the parental home. This investigation was driven by the research question, *'What role does a feathered nest play in the return process to the parental home for young adults in the Netherlands?'* In order to comprehensively address the research question, three distinct dimensions of the feathered nest were explored; the financial and housing situation of the parents as well as the nature of the parent-child relationship. Overall, through the implementation of a number of discrete time logistic regression models, this study aimed to answer the above-mentioned research question. Additionally this study aimed to contribute to the existing boomerang literature which exhibits a somewhat limited investigation into how a feathered nest particularly with regard to housing influences the return process of young adults to the parental home.

6.1 The Feathered Nest - Parental Income

An exploration into the feathered nest and the role parental income plays in the return process leads to the identification of an association between the two. The highest odds of returning belong to young adults with parents in the 2nd, 3rd and 4th income quintile whereas individuals whose parents have no income or have an income in the lowest or highest quintile display the highest likelihood of returning. Low income families are likely to display less capabilities of supporting a young adult in their home with the return of an adult child likely to be a financial burden (Van den Berg et al., 2018). This result provides evidence of the twofold nature of the feathered nest, whereby families with middle-high level incomes demonstrate the ability to financially support their children in the parental home whilst families in the highest quintile are more likely to support their child financially outside of the parental home (Olofsson et al., 2020). Furthermore, this result provides evidence for the gilded cage debate put forward by Avery et al (1992) in which they suggested that high levels of parental income would constitute lower returns due to the ability of the parents to provide financial aid to their children to help them secure residential independence. An interesting finding with regard to parental income is the insignificance of the highest quintile compared to the lowest quintile when both the income of the individual and the distance the young adult lives away from the parental home are not accounted for. This is quite surprising as one would expect the existence of a relationship between parental income and the income of the individual however the influence of the distance to the parental home on this relationship is unexpected. Perhaps, the lower likelihood of returning in the highest quintile is associated with the distance to the parental home through the capability of high income families to help their children to relocate to areas with increased labour market and housing opportunities regardless of geographic distance. Consequently, individuals in this area would experience a lower likelihood of returning. Overall, partial support for the first hypothesis formulated by this study is found which stated, '*The greater the financial resources of the parents the higher the likelihood of a young adult returning to the parental home.'* As the parental income increases from no income to the 4th quintile an increasing likelihood of returning is observed leading to partial support of hypothesis 1. Nonetheless, the finding for the highest quintile whereby young adults with parents in this category experience a lower likelihood of returning provides no support for hypothesis 1.

6.2 Housing Characteristics

This study also found an association between the housing tenure of the parental home and the likelihood of a young adult experiencing a boomerang move. Young adults with parents living in privately rented homes display the highest likelihood of returning whilst individuals with parents in a socially rented home display the lowest likelihood of returning. This is a somewhat surprising finding as one would expect the highest returns to be seen in owner-occupied homes due to the decrease in financial pressures associated with home ownership as compared with private rent. Nonetheless, it must be noted that privately rented parental homes make up a small proportion of the housing market. Previous research finds an increased likelihood of leaving the parental home when the parental home is rented instead of owned (Mulder & Clark, 2000; Mulder, 2013; Bayrakdar & Coulter, 2018), with a similar relationship likely to be observed with returning. Although social housing is particularly common in the Netherlands and is usually of a higher standard than in other European countries, its association with somewhat precarious and inflexible living conditions is a driving factor of the lower likelihood of returning. When analysing the role of social housing on the return process without controlling for individual factors a non significant relationship is found. Nevertheless, as this finding was only observed when not accounting for individual factors one could argue the importance of the housing tenure of the young adult alongside other individual characteristics in predicting their boomerang behaviours. For instance, it is unlikely that a young adult will move from an owner-occupied home to an owner-occupied parental home, likewise, a move from a socially rented home to a socially rented parental home would be uncommon.

An examination of the feathered nest in terms of the living space size of the parental home suggested that there is a small effect of living space size on the likelihood of returning. Individuals whose parents lived in a home with greater than 200 metres squared of living space experienced the lowest likelihood of returning whilst all the other categories did not differ significantly from each other. This is a somewhat surprising observation as one would imagine that a greater living space would be associated with increased privacy and personal space for a young adult in the parental home. Van den Berg et al (2018) outlines that large amounts of living space in the parental home increases the quality of the life for a young adult. Perhaps, one could argue that homes with larger living spaces tend to be found in areas outside of the city and therefore young adults may be less likely to return as they don’t want to leave the lifestyle and opportunities associated with city living. Additionally, one could argue that

homes with a larger living space are associated with wealthier and more affluent families who are known promoters of independent living for their children. Moreover, it must be noted that the occurrence of homes with a living space of over 200 metres squared is rare in the Netherlands and is usually only observed in very affluent families. Generally, partial support for hypothesis 2 is observed which stated, *'Young adults with a parental home that is owned by the parents and has a large living space have a higher likelihood of returning to the parental home.'* The difference in the likelihood of returning between socially rented and owner-occupied parental homes provides support for this hypothesis. Despite this, the lack of association between the living space size and the odds of returning alongside the observation in which a living space larger than 200 metres squared is associated with lower returns provides evidence against the support of hypothesis 2.

6.3 Family Structure

A significant relationship between family structure and the likelihood of a young adult returning to the parental home has been identified by this research. Individuals who come from a two-parent household have a higher likelihood of returning compared to young adults from a one-parent household. This finding is in line with previous research by Aquilino (1991), Goldscheider & Goldscheider (1998), Sandberg-Thoma et al., (2015), Raab, (2017) and Van den Berg et al, (2018) whereby they all observed a higher numbers of returns to two parent family structures. Individuals are less likely to return to a parental home which contains only one parent and this is largely related to the ability of the parental home to offer a nurturing and supportive environment in which emotional resources are exchanged. A two-parent family is often characterised by stability whereby the presence of two parents increases the amount of support that can be offered to the young adult. A less close relationship between the child and parent in non-intact families is often observed (Afifi & Schrodt, 2003), with children from non-intact families less likely to regard their parents as a source of support and help (Amato et al., 1995; Kalmijn and Dronkers, 2015). Nonetheless, an interesting result with regards to family structure was observed whereby when only controlling for individual exogenous variables, one-parent families display a higher likelihood of a return. Whereas, when all other parental and individual characteristics apart from education level are considered, family structure has an insignificant effect on returning to the parental home. This is a somewhat surprising result which highlights the mediating effect the educational level of the young adult has on the relationship between family structure and boomeranging. Perhaps this result can be partially explained by the creation of the family

structure variable whereby even if a parental home contained one parent and a new partner they were considered to be a one-parent household. This is somewhat problematic in that in some cases the presence of a new partner or even step-parent has a positive effect on the young adult and therefore can increase their likelihood of returning.

Secondly, although no association between the age difference between the young adult and their father on the return process was found, a negative association was found for their mother. An increasing age gap between the young adult and their mother decreased boomerang mobility as larger age differences could be associated with a lower quality parent-child relationship. Older aged parents may also display less capabilities to welcome adult children back into the parental home as a result of health issues associated with increased ages, with young adults less likely to want to become a burden on older parents. Additionally, a positive association between the distance to the parental home and the likelihood of returning is observed with increasing distances encouraging returns. This result provides a differing outcome that was initially hypothesised in that it was expected that younger adults that lived closer to their parents would be more likely to return. One could argue that short distance moves away from the parental home are more likely to be associated with a quest for independence rather than necessity and therefore returning in this case would be less likely. The literature suggests that long distances can often be a deterrent of mobility due to the economic and social costs of the move (Gillespie & Lei Lei, 2020). Similarly, Leopold et al (2012) highlight how long distances between a parent and child often decreases the quality of the relationship. Nevertheless, the result could be explained by young adults wanting to return to the parental home to repair the relationship with the parents if it has deteriorated due to the distance or perhaps in times of negative shocks they have no choice but to return regardless of the distance.

Lastly, the presence of siblings in the parental home also acts as a predictor of returning as a parental home containing one sibling constitutes the highest likelihood of returning. The literature provides some debate on the relationship between the number of siblings in the parental home and the odds of returning. On the one hand, research by Cicirelli, (1995) and Voorpostel & Blieszner, (2008) highlights the close relationships siblings tend to have with each other and consequently their presence would not act as a deterrent to a return. Similarly, other scholars have outlined the influence of the behaviour of a sibling on an individual's life course including boomerang behaviours (Buyukkececi & Leopold, 2020; Her et al., 2022). Whereas, on the other hand, a sibling

free parental home tends to be associated with a less crowded and more private home in which there is more access to parental resources (Mitchell, 1989; Blaauboer & Mulder, 2009). Research outlines the resource dilution associated with an increased number of children in the parental home (Becker, 1973; De Falco et al., 2023). Consequently, the presence of other children in the parental home has the potential to also act as a deterrent to returning.

Partial support for the third and final hypothesis is observed which stated, *'Young adults with a parental home that is owned by the parents and has a large living space have a higher likelihood of returning to the parental home.'* The role of family structure is observed in the results, likewise the association between the closeness of age with the mother provides some support for hypothesis 3. A parental home containing other siblings does lead to an increased likelihood of returning as hypothesised. However, the relationship between the distance to the parental home and returning goes in a different direction than expected as individuals who live further away display higher propensities of returning.

6.4 Individuals Characteristics

The results of the explanatory analysis also offer an insight into the attributes attached to individuals who display higher tendencies of returning to the parental home. Firstly, it can be observed that the financial status of a young adult displays a negative association with returning to the parental home. When the income of the young adult increases and the likelihood of returning decreases. Further evidence of the importance of income on the young adult's ability to remain outside of the parental home is observed through the association between the activity status of the young adult and returning. Individuals who are inactive and subsequently without income are most likely to return. Furthermore, individuals who left paid work in the previous year display a higher likelihood of returning. This result proves to be in line with a wealth of previous research identifying the loss of paid employment as a trigger for a return to the parental home (Stone et al., 2013; Matsudaira, 2016; Kleinepier & de Valk, 2017; Arundel & Lennartz, 2017). High levels of personal income can be associated with the ability to remain financially independent outside of the parental home with an increased financial independence likely to be associated with the ability to also sustain residential independence. Many of the observed boomerang moves

amongst young adults are largely associated with financial instability and unemployment and the subsequent reliance on the safety net offered by the parental home (Albertini & Kohli, 2012; Kaplan, 2012; Stone et al., 2013; Matsudaira, 2016; Arundel & Lennartz, 2017). Additionally, low levels of returning were observed amongst those who were receiving a form of welfare benefit pointing to the influence of the Dutch welfare system. Comparative research on boomeranging in Europe highlighted that returning was least common in countries with an extensive welfare state in which even in times of economic adversity young adults could receive a form of welfare aiding their chances of remaining outside of the parental home (Arundel & Lennartz, 2017). In the Dutch context, educational subsidies alongside housing assistance have somewhat aided Dutch young adults in their ability to remain outside of the parental home (Mulder et al., 2002; Druta et al., 2019).

Additionally, the role of education in the process of returning to the parental home is observed in the results. Generally, a higher level of education is associated with a lower likelihood of returning with a graduation in the previous episode also decreasing the odds of returning. A higher level of education alongside graduation from an educational level is associated with increased access to the labour market which in turn is likely to increase the financial independence of a young adult. This is in line with research by Kaplan (2012) and Wiemers (2014) who concluded that higher levels of education were associated with an increased ability to remain stable outside of the parental home. Nevertheless, the literature shows graduation to be a trigger event of returning as young adults seek the safety net of the parental home during the uncertain period post education (Goldscheider & Goldscheider, 1999; Stone et al., 2013; South & Lei, 2015).

Furthermore, the marital status of the individual proved to be a strong predictor of the return process as individuals who were single or had separated in the previous episode displayed the highest likelihood of returning to the parental home. Single individuals generally tend to have little family ties outside of the parental home and therefore a return is much easier. Similarly, separated individuals are more likely to return due to the negative shock of the event and seek a comforting and nurturing environment in the parental home (Albertini & Kohli, 2012; Arundel & Lennartz, 2017; Olofsson et al., 2020). In the case of separation of a cohabiting couple, a return to the parental home may also be out of necessity.

With regards to a number of demographic characteristics of the individual, an observation in which females have lower odds of returning to the parental home than males is found. This result is not in line with what was found in the Kaplan Meier estimate provided above. Nonetheless, this result provides evidence of the influence of other factors on the relationship between gender and boomeranging. Research has identified that females tend to leave the parental home at an earlier age than men with early leavers also associated with a higher likelihood of returning (Goldscheider et al., 2014). Consequently, the age of leaving home could be a strong predictor of the relationship between gender and returning to the parental home. The age of an individual also shows an association with returning as younger individuals display a higher likelihood of returning than older age groups. Young adults with an ethnic background other than Dutch native possess a higher likelihood of experiencing a boomerang move highlighting the evident role played by ethnic origin in the return process. The role of ethnicity and differing family backgrounds and cultures is also identified in the literature whereby it is argued that ethnic groups that display more traditional and family oriented values experience higher levels of intergenerational coresidence (Reher, 1998; Duncan & Pfau-Effinger, 2012; Jappens & Van Bavel, 2012; Inglehart, 2015).

6.5 Individual Housing Characteristics & Location of the Parental Home

A relationship between a number of attributes of the young adults' home and their likelihood of returning can also be observed. Unsurprisingly, young adults who live in owner-occupied homes experience the lowest likelihood of returning to the parental home with those residing in socially and privately rented homes displaying higher tendencies of boomeranging. In some ways, the increased likelihood of returning for those living in socially and privately rented homes ties in with the financial situation of the young adult whereby they may lose their ability to remain residentially independent during periods of economic instability and therefore return to the parental home (Stone et al., 2013; Matsudaira, 2016; Arundel & Lennartz, 2017). Young adults living in owner-occupied usually display high levels of financial capability and therefore unsurprisingly very rarely return to the parental home, this group may also provide an example of the gilded cage argument put forward by Avery et al (1992) in which parents financially support their children outside of the parental home through the buying of property for them. Additionally, the measurement of housing tenure proves to be somewhat problematic especially in the case

of the young adult as it fails to account for the high proportion of young Dutch adults living in shared residences. Young adults with a living space of 80-140 metres squared display the highest likelihood of returning which is a somewhat surprising finding as one would expect young adults with smaller living spaces more likely to return as a result of the lack of privacy and available space associated with smaller houses. Moreover, the living space size of the young adults' dwelling is also likely to be impacted by the high prevalence of shared residences.

The urbanity of the young adults' home is also seen to influence the return process with those who reside in urban residences most likely to return. This could be associated with housing prices and availability with young adults struggling to afford and find suitable accommodation in very urban areas where house prices tend to be high and availability low. Research has identified the Netherlands as an area with a vulnerable housing market due to gaps in income levels and housing prices leaving entering the housing market increasingly challenging for young adults (The Economist, 2022). No association between the urbanity of the parental home and returning was observed. Lastly, the results for the labour market region of the parental household are somewhat surprising in that individuals with parents living in a core region are the least likely to return whilst those with parents in a semi-periphery are the most likely. Core labour market regions particularly in the Netherlands are associated with high levels of economic activity, job opportunities and overall amenities and subsequently, it would be expected that living in that region would encourage a return the most. The inability of this study to account for the labour market area of the young adults household could however provide an explanation for this result.

7. Conclusions

In conclusion, this study provides some insightful results with regard to the role the feathered nest plays in returning to the parental home for young Dutch adults. Generally, income proves to be a predictor of this relationship with a high parental income associated with a higher likelihood of returning. However, parents receiving the highest income act as a deterrent of a return. Likewise, an association between the housing tenure of the parental home and returning is observed with individuals whose parents are in a socially rented household decreasing the likelihood of a young adult returning. Additionally, with regard to family structure, a higher likelihood of returning to a two-parent household is observed. An increasing distance between the young adults'

residence and the parental home increases the likelihood of a boomerang migration. Whereas, an increasing age gap between the mother and the young adult decreases the likelihood of a return. Overall, one can conclude that each aspect of the feathered nest examined; parental, housing and family structure, plays a role in the likelihood of a young adult returning to the parental home in the Netherlands after a period of independent living.

7.1 Strengths & Limitations

As with any research project some limitations and issues were encountered. Firstly, a number of challenges of using register data for the first time came to the fore. The person-years format of register data can be somewhat challenging to grasp and therefore a lot of time was spent trying to understand the data. Additionally, the provision of the data in the Dutch language added to the data preparation procedure whilst the operationalisation of the large number of variables to maximise their output was a time consuming process. Consequently, the analysis was somewhat inhibited by the time pressure of the project. Additionally, it is important to note that the results of this study were somewhat inhibited by measurement issues in the data. The upkeep of register data relies on the ability of Dutch citizens to regularly report changes in their residential address alongside a number of other characteristics such as income, activity status and marital status. A lack of prompt reporting or reporting in general means that register data cannot always capture the real life situation of the participant. The measurement of the structure of the parental home before leaving and its use in creating the parental variables employed in this research proves to be another small data limitation as any changes in the structure of the parental home during the observation period cannot be accounted for. A small number of other problems encountered with the variables and their measurement and availability have been discussed throughout the methodology and discussion chapter of this thesis.

Furthermore, as a non-Dutch native understanding the reasons for the results was not always possible due to the lack of known information surrounding for instance the economy and labour market regions in the Netherlands. Nevertheless, speaking with other Dutch natives and making use of the previously published academic literature somewhat diminished this issue. Perhaps the most important limitation of this study centres around its inability to provide information surrounding the reasons for the observed returns to the parental home. Although it is

beneficial to know what individual and parental characteristics increase the likelihood of a return, the role the reason and motivation for returning plays in the process cannot be ignored. Additionally, it must also be noted that the theoretical basis of this study: 'the feathered nest' stems from research on the mobility patterns of young adults in the United States. Consequently, in some cases, the feathered nest may not be applicable to or applies differently to the Dutch context.

Nonetheless, this study provides an important insight into the relationship between a feathered parental home and the return process. The use of Dutch register data greatly increased the validity of this study as a wealth of information surrounding the individual and their parents was obtained. A large sample size allows for the results to be extrapolated to the entire population with the longitudinal nature of data also allowing for the observation of trends and changes over time. Previously, much of the literature has focused on the relationship between a feathered nest and leaving home. Subsequently given the limited existing research on the relationship between the parental home and returning, this study offers a distinctive perspective on this topic.

7.2 Future Research & Recommendations

An exploration into the changing way of both working and living emerging from the COVID-19 pandemic has the potential to be an interesting avenue for future boomeranging research. The introduction of hybrid and work from home measures has the potential to impact return mobility in the Netherlands as young adults have increased freedom in their residential choices. Additionally, as mentioned as a limitation of this study, the exploration into the reason for returning alongside the role of the feathered nest proves to be an exciting avenue for future research. Although it is widely acknowledged in the research that young adults tend to return in times of negative shocks and post education, a more in depth study into the motivations for returning could provide fruitful results. Such research could be undertaken through the implementation of a survey in which young adults are asked about the reasons why they choose to return to the parental home.

Furthermore, the previous academic literature and this research project reiterate the challenges young adults face when leaving the parental home in entering both the labour and housing market. Increased precarity in thesectors makes gaining financial and residential independence for a young adult increasingly challenging. Despite life course reversals and boomeranging becoming more prominent amongst the younger generation, late leaving and returning to the parental home can often still be met with negative connotations and stigma, and additionally has the potential to impact the wellbeing of both the young adult and the parents. Consequently, the evident trends in boomeranging observed in the Netherlands remain to be a consequence of the increasing cost of living, the instability and inaccessibility of the housing market alongside the precariousness of the labour market. Addressing these issues continues to be an ongoing challenge for the Dutch government and policymakers.

8. ***References***

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9. Appendix

Table Three: Sample Selection and Missing Values for Each Variable in this Study

Sample Selection **Total Number of Observations at beginning = 11.383.817**	
	Number of Observations Dropped
Dropping all observations before leaving home	8.726.452
Dropping all observations after returning home	417.992
Dropping all individuals aged 14-16	13.684
Dropping observations from 2011 and 2021	335.538
Setting the observation period for a max of 5 years	200.455
Total Number of Observations = 1.689.696	

Variable	**Number of Missing Values**
Age	1
Gender	0
Ethnic Group	0
Year Left Home	0
Personal Income (Young Adult)	64.925 (3.84%)
Housing Tenure (Young Adult)	0
Urbanity (Young Adult)	1
Living Space (Young Adult)	6.045 (0.37%)
Marital Status	0
Educational Level	0
Activity Status	0
Income (Parental)	31.119 (1.97%)
Housing Tenure (Parental)	0
Urbanity (Parental)	0
Living Space (Parental)	3.002 (0.19%)
Labour Market Area (Parental)	0
Family Structure	0
Distance to Parental Home	0

Age Difference Mother	4.199 (0.27%)
Age Difference Father	51.880 (3.37%)
Number of Children in Parental Home	24
Final Number of Observations = 1.486.231	

Table Four: Model One containing information on the Income of the Parental Household Controlling for Individual Income and a number of Exogenous Controls

	Model One Coefficient (Robust SE)
Parental Household Income (Ref: Q1)	
Q2	0.049 (0.013)***
Q3	0.129 (0.012)***
Q4	0.112 (0.013)***
Q5	-0.006 (0.014
Person Without Income	-0.078 (0.015)***
Individual Personal Income (Ref: Q1)	
Q2	-0.239 (0.010)***
Q3	-0.638 (0.012)***
Q4	-1.018 (0.014)***
Q5	-1.210 (0.023)***
Ethnic Group (Ref: Native Dutch)	
Morocco	0.101 (0.024)***
Turkey	0.363 (0.021)***
Suriname	0.306 (0.024)***
Antilles	0.091 (0.039)*
Other Non-Western	0.209 (0.017)***
Other Western	0.106 (0.015)***
Gender (Ref:Male)	
Female	-0.112 (0.007)***
Age Categories (Ref: 17-21)	
22-25	-0.262 (0.009)***
26-30	-0.717 (0.013)***
31-35	-0.928 (0.022)***
Year Left Home (Ref: 2012)	
2013	0.009 (0.012)
2014	-0.003 (0.012)
2015	0.028 (0.013)*
2016	0.020 (0.014)
2017	-0.022 (0.015)
2018	-0.030 (0.016)

2019	-0.099 (0.019)***
Years Since Leaving Parental Home (Ref: T = 0)	
1	0.989 (0.011)***
2	0.719 (0.012)***
3	0.631 (0.013)***
4	0.589 (0.016)***
5	0.466 (0.019)***
Constant	-2.702 (0.016)***
Pseudo R Squared	0.0602
N	1,486,231
***P<0.001 **P<0.01 *P<0.05	

Table Five: Model Two containing information on the Housing Tenure and Living Space Size of the Parental Household Controlling for the Individual Version of these variables, the Location of the Parental Home and a number of Exogenous Controls

	Model Two Coefficient (Robust SE)
Parental Housing Tenure (Ref: Owner-Occupied)	
Private Rent	0.033 (0.016)***
Social Rent	-0.063 (0.012)***
Unknown	-0.067 (0.044)
Parental Home Living Space (Ref: 1-100)	
100-140	-0.011 (0.011)
140-200	-0.035 (0.013)**
>200	-0.044 (0.014)**
Housing Tenure (Ref: Owner-Occupied)	
Private Rent	0.595 (0.011)***
Social Rent	0.308 (0.011)***
Unknown	0.666 (0.020)***
Urbanity (Ref: Rural)	
Urban	0.122 (0.009)***
Living Space of Household (Ref: 1-80)	
80-110	0.036 (0.009)***
110-140	0.038 (0.011)**
>140	0.103 (0.011)***
Parental Home Labour Market Area (Ref: Periphery)	
Semi-Periphery	0.016 (0.009)
Core Region	-0.145 (0.009)***

Parental Home Urbanity (Ref: Rural)	
Urban	-0.021 (0.009)*
Ethnic Group (Ref: Native Dutch)	
Morocco	0.201 (0.024)***
Turkey	0.492 (0.021)***
Suriname	0.426 (0.024)***
Antilles	0.169 (0.039)***
Other Non-Western	0.282 (0.017)***
Other Western	0.133 (0.015)***
Gender (Ref:Male)	
Female	-0.018 (0.007)*
Age Categories (Ref: 17-21)	
22-25	-0.499 (0.009)***
26-30	-1.125 (0.013)***
31-35	-1.351 (0.022)***
Year Left Home (Ref: 2012)	
2013	0.004 (0.012)
2014	-0.009 (0.012)
2015	0.014 (0.013)
2016	-0.003 (0.014)
2017	-0.053 (0.015)***
2018	-0.064 (0.016)***
2019	-0.135 (0.019)***
Years Since Leaving Parental Home (Ref: T = 0)	
1	0.683 (0.011)***
2	0.418 (0.012)***
3	0.345 (0.013)***
4	0.324 (0.016)***
5	0.217 (0.019)***
Constant	-3.001 (0.020)***
Pseudo R Squared	0.0558
N	1,486,231
***P<0.001 **P<0.01 *P<0.05	

Table Six: Model Three containing information on the structure of the parental home controlling for a number of Exogenous Controls

	Model Three Coefficient (Robust SE)
Parental Household Structure (Ref: Two Parent Family)	
One Parent Family	0.041 (0.008)***

Number of Kids in the Parental Home (Ref: 0)	
1	0.069 (0.009)***
2	0.025 (0.012)*
3	-0.018 (0.016)
Age Difference Mother	0.006 (0.001)***
Age Difference Father	0.001 (0.001)
Distance to the Parental Home	0.004 (0.000)***
Ethnic Group (Ref: Native Dutch)	
Morocco	0.181 (0.024)***
Turkey	0.417 (0.021)***
Suriname	0.387 (0.024)***
Antilles	0.172 (0.039)***
Other Non-Western	0.275 (0.017)***
Other Western	0.142 (0.015)***
Gender (Ref:Male)	
Female	-0.036 (0.007)*
Age Categories (Ref: 17-21)	
22-25	-0.529 (0.009)***
26-30	-1.226 (0.013)***
31-35	-1.478 (0.022)***
Year Left Home (Ref: 2012)	
2013	0.014 (0.012)
2014	-0.002 (0.012)
2015	0.027 (0.013)*
2016	-0.007 (0.014)
2017	-0.041 (0.015)**
2018	-0.056 (0.016)***
2019	-0.125 (0.019)***
Years Since Leaving Parental Home (Ref: T = 0)	
1	0.835 (0.011)***
2	0.564 (0.012)***
3	0.481 (0.013)***
4	0.452 (0.016)***
5	0.339 (0.019)***
Constant	-2.731 (0.035)***
Pseudo R Squared	0.0514
N	1,486,231

*****P<0.001 **P<0.01 *P<0.05**

Table Seven: Model Four containing information on all Parental Characteristics employed in this Study controlling for a number of Exogenous Controls.

	Model Four Coefficient (Robust SE)
Parental Household Income (Ref: Q1)	
Q2	0.052 (0.013)***
Q3	0.119 (0.012)***
Q4	0.111 (0.013)***
Q5	0.010 (0.014)
Person Without Income	-0.088 (0.015)***
Parental Housing Tenure (Ref: Owner-Occupied)	
Private Rent	0.156 (0.016)***
Social Rent	-0.011 (0.012)
Unknown	-0.060 (0.044)
Parental Home Living Space (Ref: 1-100)	
100-140	0.008 (0.011)
140-200	0.014 (0.013)
>200	0.014 (0.014)
Parental Household Structure (Ref: Two Parent Family)	
One Parent Family	0.022 (0.008)*
Number of Kids in the Parental Home (Ref: 0)	
1	0.069 (0.009)***
2	0.028 (0.012)*
3	-0.003 (0.016)
Age Difference Mother	-0.006 (0.001)***
Age Difference Father	0.001 (0.001)
Distance to the Parental Home	0.004 (0.000)***
Ethnic Group (Ref: Native Dutch)	
Morocco	0.236 (0.024)***
Turkey	0.452 (0.021)***
Suriname	0.386 (0.024)***
Antilles	0.175 (0.039)***
Other Non-Western	0.295 (0.017)***
Other Western	0.149 (0.015)***
Gender (Ref:Male)	
Female	-0.036 (0.007)*

Age Categories (Ref: 17-21)	
22-25	-0.524 (0.009)***
26-30	-1.214 (0.013)***
31-35	-1.461 (0.022)***
Year Left Home (Ref: 2012)	
2013	0.013 (0.012)
2014	-0.004 (0.012)
2015	0.025 (0.013)*
2016	-0.005 (0.014)
2017	-0.044 (0.015)**
2018	-0.059 (0.016)***
2019	-0.129 (0.019)***
Years Since Leaving Parental Home (Ref: T = 0)	
1	0.839 (0.011)***
2	0.568 (0.012)***
3	0.484 (0.013)***
4	0.455 (0.016)***
5	0.342 (0.019)***
Constant	-2.813 (0.037)***
Pseudo R Squared	0.0521
N	1,486,231

*****P<0.001 **P<0.01 *P<0.05**