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Determinants of external labor mobility in the public sector

The influence of personal and job factors on the outflow of public servants from the Dutch Government

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Preface

"If I'm too drunk to know if the rum is gone, and no one else knows if the rum is gone, then is the rum really gone?"

- Captain Jack Sparrow

I believe that every student at some point in the process of writing the Masterthesis starts to ask questions similar to the level of reasoning of the dear Captain quoted above. After long days of hard work at the Ministry of the Interior and Kingdom Relations or at the University the danger of losing the sense of signaling when you are actually dredging rather than logically reasoning occurs. It is at these moments when help is most needed. I was lucky to have this help.

First of all, I would like to thank my thesis supervisor at Utrecht University Tanja van der Lippe for her excellent guidance. While the feedback sessions where intense, I always left full of inspiration and motivation to further work on my thesis. I was – and still am – amazed by your capability of immediately recognizing the core of an issue, which helped me a great deal in structuring and writing my thesis. Second, I would like to thank the 'Policy Information' department of the Ministry of the Interior and Kingdom Relations (DGOO) for a great five months. It was a pleasure getting to know all of you and to be a part of the team. While I am grateful for the feedback many of you gave during the process, I would particularly like to thank my internship supervisors Mariya Hulzebosch and Wim Rietdijk for their input.

Not only my supervisors were there for me in times of struggle, but also my fellow students. While I spoke with many of you, I would particularly want to thank Marlies for the laughs, the tears, the long conversations about boring stuff, the long conversations about less boring stuff, the life lessons and – of course - the feedback on my thesis. Also, thank you Matthijs and Sascha for the long days in the library. Couldn't have done it without you guys! And last but not least, I want to thank my girlfriend Manouk for her (mental) support.

In front of you lies the result of the past five months. I am proud of what it has become, and I hope you'll enjoy reading it.

Luuk Mandemakers
June 26, 2017

"You know somethin', Utivich? I think this just might be my masterpiece."

- Lieutenant Aldo Raine

Summary

Blok (2015) wrote a letter to the members of parliament in which he raised the alarm that the Dutch government lacks external labour mobility. He claimed that the government is lagging behind on other organizations and that this issue should be addressed. Low rates of external labor mobility are problematic since this points to low rates of dynamics within the organization. A dynamic organization is desired, because it is for example important for firm performance (Somaya, Williamson & Lorinkova, 2008) and for the employability of the employees (Benson, 2006; Dacre Pool & Sewell, 2007; McQuaid & Lindsay, 2005). This thesis therefore focused on finding determinants of external labor mobility for Dutch public servants. By scrutinizing potential determinants, more insight is gained in how to stimulate external labour mobility within the Dutch government. Altogether, the following research goal was formulated:

"Acquiring knowledge to discover determinants that explain external mobility in the Dutch government."

An opportunity-constraint model is used in order to examine whether or not personal and job factors affect external labor mobility. With regard to personal factors, it is expected that higher educated public servants have more opportunities and fewer constraints in the labor market and are therefore more inclined to switch organizations. For age, being a female and having a non-Dutch ethnical background it is expected that public servants have fewer opportunities and more constraints in the labor market and are therefore less inclined to switch organizations. Furthermore, with regard to job factors, it is expected that public servants with a temporary contract and high work hours are more inclined to switch organizations. For those with high job satisfaction it is expected that they will be less inclined to leave the Dutch government.

In this thesis, cross-sectional data from the biannual PoMo survey held at the Ministry of the Interior and Kingdom Relations is used. The survey contains extensive information on, among other things, labor mobility, employability, experiences of work, and superiors. While samples of all Dutch civil servants are drawn, for this study merely the public servants are selected. Combining the waves of 2010, 2012, and 2014 resulted in a dataset of 11,977 public servants.

After testing the expectations, some determinants for external labour mobility in the Dutch government were found. First of all, highly educated public servants tend to experience more external labor mobility. Also, this labor mobility is usually voluntary and they have more chances on promotion than lower educated public servants. Second, older employees are less likely to experience external labor mobility. If they do experience mobility, then this is more often of a forced nature and they also have a lower likelihood of experiencing promotions. Results contradicting expectations were found for being a female and having a non-Dutch ethnical background. Female public servants were

actually more likely to experience external labor mobility. Nothing was found however on whether this mobility would be forced or voluntary, or whether or not it entails a promotion. For those with a non-Dutch ethnical background, no results were found for them experiencing different rates of external mobility than those with a Dutch background. However, what is interesting is that it was found that when they do experience external labor mobility, then this more often has a forced nature.

Shifting to job factors, public servants with a temporary contract are more likely to experience external labor mobility than those with a permanent contract. While nothing was found on whether the mobility usually is voluntary or forced, public servants with a temporary contract do have fewer chances of experiencing promotions. Furthermore, it was found that those with high job satisfaction tend to remain at the organization. Results contradicting the expectations were found for the number of work hours. While nothing was found for the direct relation with external labor mobility, public servants with many work hours actually more often experienced forced than voluntary mobility.

Based on the findings of this study, a policy advice that consists of four measures is developed. First of all, it is argued that external labor mobility can be stimulated by introducing alternative traineeship programs. These programs are considered to be attractive for young professionals, which makes the government a more attractive employer for these young employees. Because the current traineeship programs are rather selective, alternative simultaneous programs should be developed that work more as recruitment tool. By attracting young employees, the Dutch government will automatically become a more dynamic organization. Second of all, it is possible to offer lower educated individuals training so that their employability is increased. This way, they will have more opportunities at the labor market, which could increase their rates of external labor mobility. Of course, the Dutch government would not want to let these trained employees go immediately after they received training. In order to prevent that, contracts should be made where they – if they receive training – will be forced to remain in the organization for a year or two. Third, the Dutch government should shift its flexicurity policy from wage security to employment security. Flexicurity is the concept of on the one hand increasing flexibility in the labor market (in this case by giving employees temporary contracts), and on the other hand guaranteeing security for these employees. Now, policy is predominantly focused on wage security, but employees do not only want financial security; they also want paid employment. By guaranteeing this paid employment, employees will be more inclined to accept a temporary contract, which in turn stimulates external mobility. In order to be able to do so, partnerships should be established with other organizations. If the temporary contracts end at one organization, it should then be possible for the employee to find work at the partner organization. Fourth, these partner organizations could also be used for showing employees that working at other organizations does not have to come at the cost of job satisfaction. By offering for example internships at partner organizations for satisfied employees, it is possible to perhaps even stimulate the mobility of already satisfied employees.

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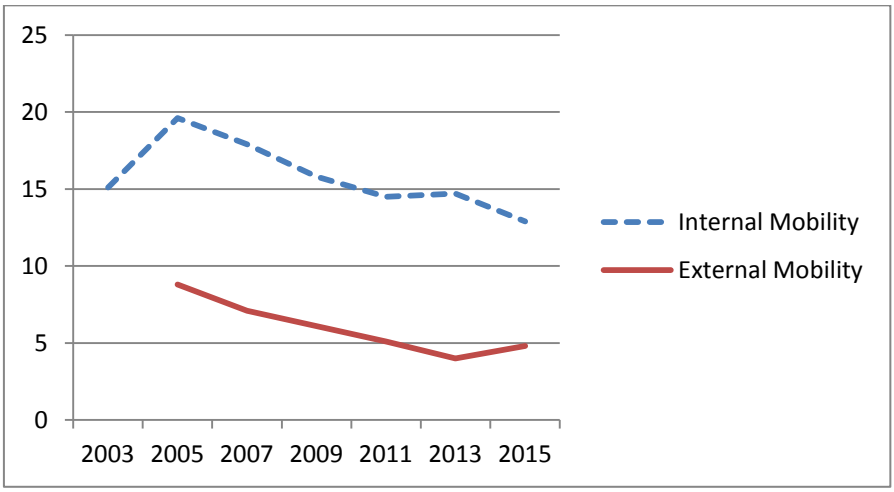
1. Introduction

1.1 The Contemporary Social Problem

In November 2015 the Dutch minister of Housing and Governmental Services wrote a letter to the Dutch parliament claiming that the Dutch government lacks labor mobility. Blok (2015) pointed out that in 2013 within the government merely 14% of the employees switched jobs and that only 4% of the employees left the government. These rates are significantly lower than any other organization in either the public or private sector. Blok (2015) argued that such low external mobility is undesirable because mobility is beneficial for both employees and employers. With regard to employees, this claim is backed up by several studies that found evidence for the positive relationship of external mobility with salary attainment (Murrell, Frieze & Olson, 1996; Amuedo-Dorantes & Serrano-Padial, 2007; Lam, Ng & Feldman, 2012), and motivation (Baron & Kreps, 1999). By developing adequate policy concerning the enhancement of labor mobility, employability and career development of employees is more likely to be improved as well (Benson, 2006; Dacre Pool & Sewell, 2007; McQuaid & Lindsay, 2005). With regard to employers, existing research underlines the positive relationship of a dynamic organization as result of high mobility rates with firm performance (Somaya, Williamson & Lorinkova, 2008). Needless to say, for the Dutch Government there is much to gain by stimulating mobility and this study attempts to discover effective ways of doing so.

Simultaneously with the publication of Blok's letter (2015) several measures were implemented to stimulate labor mobility in the government. The set of measures consists of the following: *"removing obstacles to change jobs, the inclusion of mobility as a standard in the (permanent) employment contract, realizing a transparent internal labor market, the broad use of multiannual staff plans, establishing agreements with all employees within the government about their long-term employability, and evaluating managers on their activities to promote the mobility of employees"* (Blok, 2015; p. 1). Although clearly attention is given to the issue, it can be argued that the current policy does not address the full scope of the problem. These measures seem to predominantly pay attention to facilitating job change within the organization, thereby targeting internal labor mobility and more or less neglecting external labor mobility. This is remarkable because elevating external mobility rates is vital in the process of the transition towards a dynamic organization (Somaya, Williamson & Lorinkova, 2008). Moreover, from Figure 1 it can be derived that the rates of external mobility are actually even lower than internal mobility, which can be seen as argument for the urge to address this type of mobility first.

Figure 1. Trends of internal and external mobility in the government over the past twelve years with on the x-axis 'year' and on the y-axis 'percentage of mobility'.



Sources: POMO (2016); P-Direkt (2017).

Because at this point little is known on what explains external labour mobility in the Dutch government, more insight is needed in what actually explains switch behavior of employees. In this study, insight is gathered by analyzing to what extent the decision of employees to leave an organization might be caused by personal and job factors. Personal factors are of importance because throughout the years several scholars found proof for the existence of unequal chances in the labor market based on ethnical background (Riach & Rich, 1991; Leblanc, 1995; Blommaert, van Tubergen, & Coenders, 2012; Kaas & Manger, 2012), gender (Wright & Ermisch, 1991; Darity Jr & Mason, 1998; Hersch, 2007) and age (Taylor & Walker, 2003; Riach & Rich, 2006; Moore, 2009). The fact that individuals with these characteristics have fewer chances in the labor market could influence their inclination to leave an organization. They might not be easily employed at other organizations, which could make them reluctant to leave their current organization.

Differences in rates of external labor mobility could also be caused by differences in job characteristics (Carnicer, Sanchez, Perez and Jimenez, 2004; Engelland & Riphahn, 2005). For example, Carnicer et al. (2004) showed that the amount of job satisfaction is important for employees in their consideration of staying at or leaving the organization. Other examples besides job satisfaction can be found in the relation of job search, organizational commitment, job content, work group cohesion, autonomy and promotional chances with labor mobility (Griffeth, Hom, & Gaertner, 2000). In short, the explanatory potential of job factors is there, which makes it useful to analyze whether this applies to the case of public servants in the Dutch government as well.

1.2 Defining Mobility

Before elaborating more specifically on the goals of the study, it is crucial to first address definitions of labor mobility and to specify which aspects of mobility are central in this research. Ng, Sorensen,

Eby, and Feldman (2007) made a distinction between internal and external labor mobility, which were also briefly discussed in the previous section. Internal mobility is described as *"job changes within the same organization"*, whereas external mobility can be defined as *"job changes with different employers"* (Ng, Sorensen, Eby & Feldman, 2007; p. 365). Within the context of the Dutch government, the 'organization' and 'employer' are considered to be ministries or implementing organizations. Internal mobility therefore means a job change within a Dutch ministry or implementing organization, whereas every employee leaving a ministry or implementing organization is considered to be externally mobile. Bearing in mind that this study focuses on external labor mobility, it is the latter group that forms the scope of the research.

Another distinction can be made in that labor mobility can either be voluntary or forced (Eby & DeMatteo, 2000). With regard to external labor mobility, this means that people can either personally choose to leave the organization or that the organization chooses that the employee has to leave the organization. To put it more concretely, people can choose to resign, but can also be forced to do so because they for example dysfunction or because of a reorganization. Furthermore, a distinction can be made in downward, lateral and upward labor mobility (Nicholson & West, 1988). Downward mobility is a job change towards a function of lower level than the previous function, lateral mobility is a job change towards a function of the same level, and upward mobility is considered to be a job change towards a function of a higher level.

Distinguishing these various types of mobility portrays the extensiveness of the concept of labor mobility. While Nicholson and West (1988) even distinguish twelve types of labor mobility, the distinctions made above are considered to be sufficient for gaining thorough insight in labor mobility in the Dutch government.

1.3 Research Goals

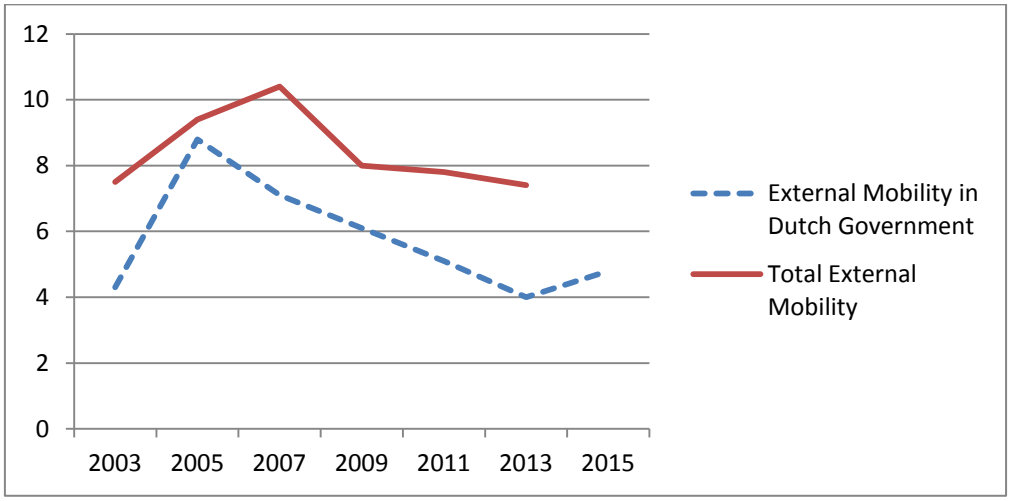
By reason of the lack of insight in employee turnover in the Dutch government, the first goal of this study is formulated as *'acquiring knowledge to discover determinants that explain external mobility in the Dutch government'*. By gathering information on potential determinants of external labor mobility a scientific fundament is provided for future policy. The second goal of this study is directly anticipating on this scientific fundament, by using the gathered information for the development of a thorough policy advice concerning the stimulation of external mobility in the Dutch government.

1.4 Scientific Relevance

At first sight, studying determinants of external mobility might seem somewhat superfluous. That is, a wide range of research attempting to explain external mobility in general is available (Ng, Sorensen, Eby, & Feldman, 2007). However, from a scientific point of view, the necessity of examining which determinants explain external labor mobility in the government is twofold. First, there is reason to

believe that the Dutch government embodies an extraordinary organization. Figure 2 presents mobility rates of the Dutch government over the past twelve years compared to mobility rates of the Dutch labor market in general over the past twelve years. From the Figure, it can be derived that the external mobility rates in the government are structurally lower than the rates of external mobility in the labor market in general. With regard to mobility, it can therefore be argued that the government is a 'special' organization that requires unique research. Considering the absence of this specific kind of research, the first argument on the scientific relevance of this study is hereby drawn.

Figure 2. Trends of external mobility in the government and in the Netherlands in general from 2003-2015, with on the x-axis 'year' and on the y-axis 'percentage of mobility'.



Sources: CBS (2015) 'Dynamics in the labor market'; CBS Statline (2017) 'Working Population'; P-direkt, (2017)

The second argument relates to the specific determinants that are scrutinized in this research. At this point, specific concepts of personal and job factors that explain external mobility of public servants remain unspecified. One of those potential determinants can be found in the personal characteristics of employees. Carnicer, et al. (2004) found that factors not related to the specific job are well-suited for explaining labor mobility. Scholars found evidence that education, age, gender, and ethnicity significantly explain labor mobility (Carnicer, et al., 2004; Heath & Cheung, 2007). These are therefore the factors addressed in this study. A theoretical framework of opportunities and constraints in the labor market is applied in order to come to a proper understanding of how these specific factors could explain external labor mobility. The application of this model is essential, because opportunities and constraints in the labor market are not similar for every individual (Burchard & Legrand, 2002). By applying this framework, it is examined to what extent inequalities in opportunities and constraints in the labor market account for varying rates of labor mobility.

Next to personal factors, job factors can also play a role in the outflow of public servants (Spector & Jex, 1991; Thatcher, Stepina, & Boyle, 2002; Gesthuizen, 2009). To put it more concretely, Carnicer

et al (2004) showed that traditional job features such as salary and social benefits are less explanatory for external mobility than job features as type of contract and job satisfaction. Simultaneously with these concepts, the data from the Personnel and Mobility Research (PoMo), which are used in this study, provide information on an additional job characteristic, namely work hours. Fouarge & Baaijens (2004) found changes in work hours to be related to job mobility, which underlines the relevance of studying the concept. Altogether, for job determinants, this results in the selection of 'contract type', 'job satisfaction', and 'work hours' as focus of this study. Again, variance in the properties of these factors could lead to varying opportunities and constraints in the labor market, which is why the theoretical framework is applied as well. The combination of personal and job factors as potentially influencing external mobility through opportunities and constraints in the labor market was not recently examined, thereby adding to the scientific relevance of this article.

1.5 Research Questions

After an in-depth elaboration on the scientific relevance of the study, it is essential to clarify how the goals of the study will be achieved. This will be done by formulating and addressing a descriptive research question, an explanatory research question and a policy question. Logically, the first two questions are developed for the realization of the first goal of the study, and the policy question is the basis for the second goal of the thesis. Starting with the descriptive part of the study, the following overarching question is formulated: *'What does the composition of the outflow of public servants from the Dutch Government look like and is this similar to the composition of current personnel?'* This question is answered by describing the composition of outgoing personnel in relation to the composition of sitting personnel. The comparison with sitting personnel is of added value because differences between both groups could help to understand reasons for outflow from the government. Then, after describing potential differences between those groups of public servants, the explanatory research question is answered, which reads as follows: *'To what extent do personal and job characteristics explain external labor mobility in the Dutch Government?'* These questions provide insight in which factors explain external mobility in the government, resulting in the groundwork on which the policy research question is based: *'What can be adequate measures for influencing external mobility so that a more dynamic organization can be realized for the Dutch government?'*

The explanatory research question will be answered by the analysis of three dependent variables. First, the effects of personal and job characteristics on whether or not public servants left the government will be hypothesized based on an opportunity-constraint theoretical framework. Second, it is analyzed whether those who actually experience external labor mobility left the government voluntary or that they were forced to do so. Third, hypotheses are drawn and effects are tested of personal and job characteristics on whether or not the actually departed employees experienced upward mobility (i.e. promotion).

1.6 Contribution

Four vital arguments can be drawn for the scientific contribution of this study. First, although there is extensive research into determinants of labor mobility in general, there is little existing literature on predictors of external mobility that focuses on the context of the Dutch government. Some studies do extensively investigate external labor mobility, but the results do not seem to be applicable to the entire Dutch government. For example, the study carried out by Thatcher, Stepina & Boyle (2002) focuses on a relatively small population of information technologists. It is unlikely that results of this population can be generalized to the Dutch government and therefore the need for research remains. An exception for where results might be more applicable is the study of Hofhuis et al (2008). They do actually study the outflow of public servants from the Dutch government, but focus only on public servants with a non-Dutch ethnical background, whereas other possible determinants are neglected. The explanatory potential and the limitations of existing literature amplify the need for filling the gap in knowledge on explaining external mobility in the Dutch government.

The second contribution is the fact that not merely external labor mobility is analyzed, but also whether or not public servants left the organization voluntary and whether or not they experienced a promotion. Such an approach is unprecedented and by doing this, a broader understanding of labor mobility within the Dutch government is gained.

The third contribution is the application of the opportunity constraint model for examining which factors could explain external mobility in the Dutch government. Labor mobility in the public sector was never examined from this point of view, whereas doing so would assist in coming to a better understanding of external labor mobility in the Dutch government.

The fourth major addition to existing scientific literature is that the current study forms a data-based contribution. All concepts will be examined based on the PoMo data provided by the Ministry of the Interior and Kingdom Relations. This data is the result of a biannual survey, which has been carried out since 1998. In every wave a sample of respondents of all public servants in the entire Dutch Government was surveyed, which makes the file unique in its kind. Furthermore, the dataset is also relatively untouched. That is, on external mobility describing analyses have been carried out in this setting, but explanatory analyses are – until now – still to be executed.

Theory

2.1 Theoretical Framework

In order to come to logically derived and formulated hypotheses, the 'opportunity-constraint model' is used as generic theoretical framework. A theoretical model with opportunities and constraints as key mechanisms has been proven to be helpful in understanding a wide array of contemporary social problems, such as 'spatial-offending' (Ratcliffe, 2006), and 'metropolitan migration' (Gordon & Vickerman, 1982). Before demonstrating its potential in relation to labor mobility however, it is essential to further define the framework itself.

First of all, it is important to make the distinction between outcomes as result of on the one hand individual preferences, and on the other hand contextual factors (Ackland, 2013). Individual preferences are desires of people that affect their behavior. For instance, people can have a preference for a particular job and therefore might be more inclined to apply for that job rather than for another. However, from a sociological point of view the contextual factors are relevant and can be considered as social and economic forces that go beyond the control of individuals (Haveman & Bershadker, 1998; Deacon & Mann, 1999). Social and economic forces are considered to form either 'opportunities' or 'constraints' that have their effects on potential outcomes. For example, looking at the process of job attainment, a labor market with a shortage of employment opportunities and therefore a surplus of potential employees has been proven to be a constraint for people that attempt to find work (Murphy & Topel, 1997). Logically, people have more trouble finding employment in this situation than when there is an abundance of labor market opportunities. In brief, Martinetti (1996) argued that failure to achieve a given level of functioning could be the result of the presence of constraints. For example, it could be that an employee wants to become the director of a large company but that there are simply no opportunities to become one, and that he or she is thereby constrained from achieving the desired level of employment.

The opportunity-constraint model can now be applied to the phenomenon of labor mobility. Labor mobility occurs when people find new jobs and in order to find new work, positions have to be available and someone must not be constrained by forces that go beyond their control. An example of this is the economic crisis. Previously to the crisis it was easier for employees to change jobs and find work, whereas afterwards this proved to be more difficult. Furthermore, sometimes people require additional training for specific positions and therefore the opportunity of training increases the likelihood of experiencing mobility (Katz & Ziderman, 1990), whereas the absence of such training could then be interpreted as a constraint. This is merely an example of a constraint in the labor market, but it does give an image of how opportunities and constraints influence job acquisition of employees and therefore mobility. If people experience more opportunity and fewer constraints, they are more likely to encounter job transition.

Applying the opportunity-constraint framework to the labor market is one thing, but making it relevant to this study is another. The opportunity-constraint framework is suitable for this study, because it can be applied to the relation between personal and job characteristics with external labor mobility. Burchardt & Le Grand (2002) identify a certain inequality in opportunities and constraints in the labor market based on personal and job characteristics. For example, opportunities strongly vary between a 35-year old white male and a 62-year-old black female. Hence, these differences in opportunities and constraints could form mechanisms for variation in mobility behavior of different groups defined by personal characteristics. For job characteristics this inequality in opportunities and constraints can be identified as well. For example, it could be that employees working in certain sectors are more attractive for employers and therefore experience more opportunities in the labor market.

Moreover, it is important to mention that whether opportunities in the labor market lead to external labor mobility is dependent on a number of factors. First of all, opportunities in the labor market can influence the future context of an employee, but also the current context. If an employee is extremely valuable, this will increase its opportunities to go to another organization. However, because the employer does not want these employees to go, the current context might also be improved for the employee. For example, the employer can improve the working conditions of the valuable employee in order to keep the employee within the organization. Second, it is important to hold supply and demand factors into account. If an employee is extremely good at his or her job, it does not necessary have to be the case that this employee has many opportunities in the labor market. If the demand for this type of labor is low and the supply of skillful employees high, then the talented employee is constrained by the structure of the labor market. Third, it is of importance to constantly be aware of the dynamics between the actors in the labor market, which might affect whether or not an employee actually experiences labor mobility. In this specific context, three actors can be specified that could affect labor mobility. First, an employee itself might encounter opportunities that perfectly match its preference and therefore he or she decides to move to another organization. Second, external labor mobility could also be due to the behavior of the current employer, which for example does not act adequately enough to improve the current situation for the valued employee. Note that the current employer could also prevent labor mobility, when he or she does handle adequately enough to improve the situation for the valuable employee. Third, other employers could make an offer that employees simply cannot refuse.

Altogether the above described framework forms the foundation for theorizing the relationships of personal and job characteristics with opportunities and constraints in the labor market, eventually resulting in an array of hypotheses on whether employees are likely to experience external labor mobility, voluntary external labor mobility, and upward external labor mobility.

2.2 Personal factors

Before shifting to hypotheses, it is important to elaborate on which specific personal factors are potentially suited for explaining external labor mobility. First, effects of education are examined, where it is theorized that the amount of human capital of an individual affects the amount of external labor mobility through encountering opportunities and avoiding constraints. Second, age is presented as determinant of labor mobility, because a wide range of literature underlines variance in opportunities in the labor market to be due to diversity in age (Noe, Steffy & Barber, 1988). Then, both gender and ethnicity are deemed to affect labor mobility, because evidence was found for variance in opportunities and constraints in the labor market between men, women, ethnic majorities, and ethnic minorities (Burchardt & Le Grand, 2002).

2.2.1 Education

In order to be able to hypothesize a relation between education and external labor mobility, it is necessary to describe the concept of human capital. The idea of human capital is that individuals invest in their own skills and characteristics in order to increase their productivity (Blaug, 1976; Becker, 1994). Having more human capital and therefore more productivity is an attractive attribute of employees to employers, which could therefore lead to increased opportunities in the labor market. Having more opportunities in the labor market makes finding a job easier, thereby stimulating job transitions. Katz & Ziderman (1990) supported this mechanism by proving that the amount of training – under the condition that it is visible to other firms so that the employee can be easily recognized as 'trained worker' – is positively related to labor mobility.

Moreover, Becker (1994) argued that education is one of the most important features of human capital. He supported this claim by making the effects of human capital tangible. For example, he proved that having high school and college education greatly increase the amount of wage an employer is willing to offer for the services of the employee. So, given that education is human capital and building on the previously presented mechanism of human capital and labor mobility, it seems that having a higher education is positively related to labor mobility.

The idea that having a high level of education increases labor market opportunities is supported by the 'signaling theory'. Connelly, Certo, Ireland, & Reutzel (2011) describe this theory as useful when two parties have inconclusive information, but still have to deal with each other. A 'sender' could then send signals to the 'receiver', hereby giving him information about relevant topics. In relation to education and the labor market, the 'sender' is the potential employee. He or she sends his or her level of education to the 'receiver', which is the potential employer. A diploma of a high education sends a signal to the employer that he or she is intelligent and therefore might be suitable for the job. In brief, having a high education sends a positive signal to potential employers, which increases the labor market opportunities of individuals, thereby possibly increasing external labor mobility.

However, current employers want to hold on to their employees with a high educational level, and therefore opportunities at other organizations do not necessarily have to lead to external labor mobility. Nevertheless, there is another mechanism lying at the basis of a potential relationship between education and external labor mobility: the piling up of resources. Klijn & Koppenjan (2016) argued that having resources makes it easier to acquire other resources. They give the example of having monetary resources that can be used to purchase other resources. Applying this to human capital, and more specifically to education, it can be argued that being highly educated increases the chance of having contact with other high educated individuals, which makes it easier to gain valuable resources and enlarges the social capital of the individual. This network could in turn be of value for gaining labor market opportunities (Granovetter, 1973). Basically, it is believed that employees with a high education have so many opportunities in the labor market that eventually better working conditions than the Dutch government could possibly offer present themselves. Altogether, the following hypothesis is formulated:

> *H1A: Having a higher education is positively related to external labor mobility in the Dutch government.*

Given mobility and if education makes employees attractive for employers and leads to a good labor market position, then this has its consequences for the type of mobility. That is, valuable employers are not very likely to be fired, which reduces the likelihood of employees with a high educational level experiencing forced labor mobility. Also, the presence of a high number of opportunities in the labor market increases the chances of voluntary labor mobility, because it increases chances of finding a job that suits ones preferences. Together, this leads to the following hypothesis:

> *H1B: Having a higher education is positively related to voluntary external labor mobility in the Dutch government.*

Building on previous mechanisms, it can be hypothesized that if highly educated people experience mobility, the new job more often concerns a promotion. Highly educated people are attractive for employees and have a labor market position full of opportunities. On the other hand, individuals with a lower education probably have many more jobs that are a promotion compared to their current situation than those with a higher education that are already relatively near the top of an organization and therefore have less opportunity for promotion. However, to encounter any promotion opportunities in the first it place it is considered to be essential to be seen as valuable by the employer. Individuals with a lower education have less chance to be considered as valuable to the employer than those with a higher education. This then leads to the following hypothesis:

> *H1C: Having a higher education is positively related to upward external labor mobility in the Dutch government.*

2.2.2 Age

Noe, Steffy & Barber (1988) theorize that employees encounter decreasing opportunities and increasing constraints in later career stages. They argue that once employees outgrow their 'initial career stage', they encounter increasing constraints in the labor market, where preferences for paying attention to family life and a loss of ambition to acquire higher status are given as essential restrictions. Shifting priorities to family life reduces the likelihood of accepting job change, since such a transition is often experienced as stressful by employees (Brett 1980; Hill & Miller, 1981), especially if this includes a change of organization. Therefore, it is more likely that employees experience more external labor mobility when they do not have the desire to spend more time with the family. Together, this could explain a negative relation between age and external labor mobility.

The above mentioned was supported by the empirical work of Topel & Ward (1992), who found that 66% of job mobility occurs within the first ten years of the career This undoubtedly points towards a strong negative relation between age and job mobility. Simultaneously, Toshkov (2017) shows a severe overrepresentation of older public servants in the Dutch government, whereas in the introduction it became clear that the external labor mobility rates in the government are rather low. Of course, this does not necessarily directly imply a statistical significant relationship, but it could be interpreted as a first indicator for a negative relation. Moreover, several other arguments for this negative relationship are presented as mechanisms below.

It seems that it is not merely increasing constraints and decreasing opportunities that account for a negative relation between age and external labor mobility. Moore, Miller and Fossum (1974) – among other scholars – argue that employees adjust their mobility preferences to *perceived* opportunities of job change. Noe, Steffy & Barber (1988; p 563) describe the common mobility preferences in early careers as *"employees are more willing to pursue movement options because they are interested in exploring different type of jobs and evaluating personal competence in different skill areas",* whereas in later career stages these positive attitudes towards mobility tend to ebb way. Now, scholars argued that these flattened attitudes at later age are the result of perceived constraints on mobility opportunities (Hill & Miller, 1981; Moore, Miller & Fossum, 1974; Vardi, 1980). Thus, since older employees think they have fewer opportunities in the labor market to switch jobs, they will believe that they also do not want to change their jobs, which in turn results in even less external labor mobility.

Lower opportunities in the labor market could also be caused by the rest explanation of statistical discrimination. Bielby & Baron (1986; p.761) defined the underlying mechanism of statistical discrimination as follows: *"the model assumes employers perceive that on average the marginal productivity of individuals differ for a given line of work"*. This lower perceived group average can be considered as problematic since, according to the economist Baily (1974), organizations and

employers tend to aim for maximum profit. This rational maximization of profits leads in recruitment processes to the hiring of the employee that has the highest marginal productivity. If employers in such procedures are unable to gather sufficient information on specific individuals, they will be more likely to base their decision - at least partially - on group averages. As posed in the previous section, employers have a preference for young employees over older employees (Moore, Miller & Fossum, 1974). Riach & Rich (2006; p. 2) even state that *"numerous surveys and research conducted in the past 15 years point to negative employer perceptions vis-à-vis older workers with respect to their productivity, cost, work, motivation, health, receptiveness towards training and ability to cope with technological and organizational change".* If employers indeed perceive older employees to be less useful than younger employees, this statistical discrimination becomes a constraint for older employees in the labor market. Employees will be less inclined to hire them, which results in fewer opportunities in the labor market and therefore fewer opportunities to switch jobs. Therefore, based on all presented mechanisms, the following hypothesis is formulated:

H2A: Age is negatively related to external labor mobility in the Dutch government.

If age is indeed negatively related to external labor mobility, this would result in job transitions that do occur at a later age to be of a predominantly forced nature. The constraints mentioned above discourage people to change jobs, which results in an increased likelihood of this transition being involuntary. In other words, if people do not want to change their occupation or experience constraints in doing so, they are logically less likely to switch jobs voluntarily. Therefore, the following hypothesis is derived concerning voluntary mobility:

H2B: Age is negatively related to voluntary external labor mobility in the Dutch government.

With regard to upward mobility, Pritchard, Maxwell & Jordan (1984) theorized that older employees have lower chances of promotion than their younger equivalents by building on a mechanism somewhat similar to statistical discrimination. They argue that if a promotion opportunity occurs, employers are more inclined to promote younger workers, because older employees are considered to have less potential than younger employees. The promotion opportunities that do arise are therefore more likely to be filled by a young employee, which restricts the number of upward mobility opportunities of older employees. This results in the construction of the subsequent hypothesis:

H2C: Age is negatively related to upward external labor mobility in the Dutch government.

2.2.3 Gender

In this section, several are presented to serve as theoretical groundwork for differences in opportunities and constraints for men and women. First of all, women are more likely to adjust their career path to the career path of their husband than vice versa (Brett & Yogev, 1988; Karambayya &

Teilly, 1992; Pixley, 2000; Valcour & Tolbert, 2003). Because gender roles remain active to some extent it is the case that when there is a job opportunity at a different organization with a different geographic location for men, the family is more likely to accept the offer than when a similar job opportunity occurs for women. This can be interpreted as constraint in the labor market for women relative to men, which is an argument to expect women to experience less external labor mobility than men.

Another mechanism underlying the potential negative relationship between women and external labor mobility is asymmetry in social resources. Granovetter (1973) laid the foundation for the idea of 'informal job search' in his famous article *"the strength of weak ties".* He demonstrated that having more so-called 'weak ties' is essential for information diffusion and therefore increases the likelihood of finding a job. The 'strong ties', i.e. close friends, continuously provide information similar to that what one already knows, because one is likely to have frequent contact to their close friends and these close friends are in turn likely to have contact with each other as well. Therefore, being in possession of weak ties increases the likelihood of obtaining unique information, which Granovetter (1973) proved to be beneficial for finding a job. Lin, Ensel, & Vaughn (1981; p. 395) later built on this article by introducing the concept of 'social resources', which they defined as *"the wealth, status, power as well as social ties of those persons who are directly or indirectly linked to the individual".* They focused on the resources of the connections of individuals, which includes the idea that if one has more social connections, he or she also has more access to the resources of these connections, which in turn increases the opportunity for individuals to find a job. Linking this mechanism to gender, early studies found that on average men have more social resources than women, which made them better at finding jobs through informal channels (Beggs & Hurlbert, 1997; Campbell, 1985; Hanson & Pratt, 1991). More recent research contradicts this claim, by stating that women have as much social resources as men (Lowndes, 2004). However, it is interesting that women do have different social resources than men, which still makes them less able to find a job via informal ways. According to Lowndes (2004) women tend to have more neighborhood-oriented social capital, which results in relatively low unique information since it is likely that people who live in close proximity to each other share similar information. Also, they tend to use their network more for emotional support purposes, which could be an indicator for having more bonding social capital. According to Putnam (2000), bonding social capital brings people of same sorts together, whereas bridging social capital brings people of different sorts together. This bridging social capital is characterized by a high amount of weak ties providing unique information, which has been proven to be beneficial for job attainment. Since evidence points towards women using their network more for bonding purposes, they will have less opportunity to acquire jobs, because they apparently are less capable of 'informal job search'. This asymmetry in social resources and therefore opportunity to find jobs is interpreted as support for a negative relation between being female and external labor mobility.

The relationship between gender and external mobility could also be built on the rest explanation of statistical discrimination. This phenomenon is considered to be seriously reducing opportunities and increasing constraints in the labor market for women (Burchardt, 2002). Bielby & Baron (1986) used the mechanism of statistical discrimination to explain job segregation based on gender, but it can also be used to explain lower opportunities and higher constraints for women in the labor market (Altonji & Blank, 1999). That is, for two reasons, several scholars found evidence for the unrighteous perception of employers that the potential marginal productivity of women is lower than the productivity of men. First, Waldfogel (1998) found maternity leave to be contributing to inequalities between men and women. The idea is that employers might be reluctant to employ women because they have the possibility to become pregnant and therefore leave the company for a certain period, whereas men obviously do not. Second, compared to their male counterpart, women more frequently work part-time (Bardasi & Gornick, 2000; Rose, Hewitt, & Baxter, 2010), which negatively affects employers' perceptions on their productivity. Because maternity leave and more part-time work influence the employers perception of women into them being less productive, this results in a negative hiring-bias for female solicitants, which is a 'constraint' for women in the labor market. Women employed at the Dutch government are therefore likely to have fewer opportunities in the labor market than male public servants, which reduces the chances for female public servants to experience external labor mobility. Altogether, the following hypothesis is derived:

> *H3A: Being a female public servant is negatively related to external labor mobility in the Dutch government.*

Given mobility, Royalty (1998) discovered that women are more prone to experience job to non-employment transitions than job to job transitions. This does of course not necessarily imply a one on one relation, because a transition to non-employment could be both voluntary and forced. On the other hand, it can be reasoned that a job to job transition is more unlikely to be forced mobility, whereas a job to non-employment transition could be. Therefore, if women do experience the latter transition more often, it could be an indicator of experiencing more forced mobility.

While the above mentioned argument might not be very convincing without further context, it becomes more convincing if the previous sections, in which it was argued that women have less opportunities and are therefore less able to find new jobs, are held into account. Considering that compared to men, women have less chances of finding a new job, it is likely that they will less frequently quit their job voluntarily. That is, people are deemed to be risk averse (Holt & Laury, 2002; Pratt, 1964), which makes it at least less logical for women to quit their jobs. Altogether, this leads to the following hypothesis:

> *H3B: Being a female public servant is negatively related to voluntary external labor mobility in the Dutch government.*

The direction of mobility (i.e. promotion or no promotion) is to be held under scrutiny as well. First, the above presented mechanisms of opportunities and constraints imply a certain lack of promotion. That is, the mechanism of social resource asymmetry could also be applied to promotion opportunities. A public servant with more 'weak ties' is likely to obtain more unique information, which benefits one's chances of promotion. Considering women to have less social resources than men, it is likely that for women, there is a negative relationship with promotion.

This negative relationship is underlined by the notion of the so-called 'glass ceiling' that reduces the likelihood of promotion for women. Evidence was found for the existence of this 'ceiling' for women (Arulampalam, Booth, & Bryan, 2007; Cotter, Hermsen, Ovadia & Vanneman, 2001), which entails the idea that women are highly underrepresented in the top layers of organizations. This clear lack of upward mobility for women, together with the fewer opportunities for promotion, leads to the following hypothesis:

> *H3C: Being a female public servant is negatively related to upward external labor mobility in the Dutch government.*

2.2.4 Ethnicity

In previous sections, it was hypothesized that statistical discrimination and resource asymmetry could be responsible for a negative relationship of being a female public servant with external labor mobility. For ethnic minorities, it can be argued that similar mechanisms are at play.

First, previously it was argued that resource asymmetry could lead to varying opportunities in the labor market. It was argued that social capital is vital for effective informal job search, thereby increasing the opportunities in the labor market for those who possess this social capital. This theory was supported by Golding and Baezconde-Garbanati (1990), who found evidence for the existence of resource asymmetry adverse to ethnic minorities. These employees possess less bridging social capital, and therefore less informal job search capabilities. The absence of the quality of informal job search constrains ethnic minorities in the labor market, which underpins a negative relationship between having a non-Dutch ethnical background and external labor mobility.

Second, the rest explanation of statistical discrimination can be applied to the situation of ethnic minorities as well. Statistical discrimination based on ethnicity occurs in the Swedish, German, and American labor market (Bertrand & Mullainathan, 2004; Carlsson & Rooth, 2007; Kaas & Manger, 2012), which is reason to consider it to be a possible mechanism for the Dutch labor market as well. Recall that this kind of discrimination diminishes the opportunities of the subject in the labor market, which decreases the amount of external labor mobility. Uhlendorff and Zimmerman (2014) argue that the disadvantaged position of employees with an ethnical background might be due to higher

unemployment rates of ethnical groups. Higher unemployment rates contribute to stereotypes and therefore images of lower marginal productivity, resulting in employers hiring mostly people without such ethnical backgrounds. Furthermore, status characteristics theory implies that differences in status form the basis of expectations (Wagner & Berger, 1993). As a result, because the status of ethnic minorities is lower, there is a systematic bias in the assessment of the qualities of employees with a non-Dutch ethnical background. Based on their lower status, employers expect them to be less productive, which results in fewer opportunities in the labor market.

On the other hand, birds of a feather flock together (Hitch, Hortacsu, & Ariely, 2010; McPherson, Smith-Lovin, & Cook, 2001; Shrum, Cheek & Hunter, 1988). People have a preference to be surrounded by those who are similar to themselves. With regard to external mobility and ethnicity, this is interesting because the vast majority of employees in the Dutch government has a Dutch ethnical background. Therefore, ethnic minorities are surrounded by employees who are not similar to themselves, which might imply that they would be eager to change jobs to organizations where people are more alike. Although this seems to be a sound argument, a recent study carried out by Wimmer and Lewis (2010) found that the mechanism of homogeneity does not particularly apply to ethnicity. They found racial segregation not to be the result of the tendency to befriend people from the same ethnicity, but rather a result of befriending people with the same status (e.g. the "elite"). If it is indeed the case that it is not so much ethnicity itself that leads to racial segregation, then ethnic minorities in the Dutch government – who arguably have about the same status as other employees in the Dutch government – might not be so inclined to search for organizations. Also, if the idea that if employees do not have opportunities in the labor market and are therefore unable to land jobs at other organizations is considered, then they are more likely to experience a job to non-employment transition when they leave the organization than a job to job transition. Since it would be irrational for them to accept a job to non-employment transition, it is believed that limited amounts of opportunities in the labor market for employees with a non-Dutch ethnical background restricts them from leaving the government, which results in the construction of the following hypothesis:

> *H4A: Having a non-Dutch ethnical background is negatively related to external labor mobility in the Dutch government.*

Because it appears to be relatively difficult for employees with a non-Dutch ethnical background to find a new job, they will also be less eager to switch jobs voluntarily. As with women, fewer labor market opportunities in combination with the risk aversion mechanism withholds employees with a non-Dutch ethnical background from external labor mobility. Therefore, with regard to voluntary mobility, the following is hypothesized:

> *H4B: Having a non-Dutch ethnical background is negatively related to voluntary external labor mobility in the Dutch government.*

Similar to women, employees with a non-Dutch ethnical background have less social resources, which results in less informal job search possibilities. As was earlier put forward, this consecutively leads to fewer opportunities for promotion. Therefore, the following hypothesis is formulated:

> *H4C: Having a non-Dutch ethnical background is negatively related to upward external labor mobility in the Dutch government.*

2.3 Job factors

Several job factors have the potential to be involved with a certain variation in opportunities and constraints in the labor market for employees. According to Engelland & Riphahn (2005) the type of contract matters for the amount of effort an employee puts into his or her job. This will be further explained later, but it is important to mention that these differences in effort could lead to differences in opportunities and constraints in the labor market and thus in labor mobility. Therefore, first the effects of having either a temporary or a permanent contract on external labor mobility are theorized. Second, the job characteristic of 'work hours' is examined, because the number of working hours is considered to be a reflection of an employees' ambition. It will be explained that ambition in turn leads to more opportunities in the labor market and therefore to more external labor mobility. Third, job satisfaction is investigated, and it is argued that job satisfaction itself forms a constraint for labor mobility. In short, satisfied employees have a strong motivation to not make changes in their current situation and are therefore constrained by their own desire to maintain the situation as it is.

2.3.1 Contract Type

The Dutch government implemented policy aiming to reduce temporary contracts in favor of permanent contracts (Rijksoverheid, 2015), while in the introduction it became clear that external labor mobility is declining as well. If having a temporary contract determines external labor mobility, then this could at least partially explain the low rates of external labor mobility within the Dutch government. While it cannot be tested whether the occurring decline is actually due to temporary contracts, it is together with three underlying mechanisms presented below considered to be sufficient ground for expecting a positive direction for that relation.

First, Engelland & Riphahn (2005) argued temporary contracts to be an incentive for employees to put in extra effort. Permanent contracts provide a certain amount of employment protection that temporary contracts do not, which is why employees with a temporary contract will be more inclined to leave the organization if the opportunity of a permanent contract is available elsewhere. Furthermore, if such opportunities do not immediately arise, temporary contract workers are likely to attempt to acquire permanent contracts by putting in more effort (Engelland & Riphahn, 2005). This effort implies an increased likelihood of higher productivity compared to permanent contract employees, which makes

them more attractive for employers. The willingness of employers to employ hard-working employees gives temporary contract workers more opportunities in the labor market, which results in a positive relationship of temporary contracts with labor mobility.

Second, previous studies found the transition from probation to employment protection to be connected with an increase in absenteeism (Ichino & Riphahn, 2001; Riphahn & Thalmeier, 2001). Compared with temporary ones, permanent contracts are characterized by more employee protection, which reduces the costs for employees to call in sick. High rates of absenteeism are unfavorable for employers, since less frequent absent employees are more productive for the organization. In terms of absenteeism, temporary contract workers have therefore more opportunity to be hired by employers, which is support for the expected positive relationship between temporary contract workers and external labor mobility.

The third and last mechanism involves the idea that a permanent contract itself can be interpreted as a constraint for labor mobility. When employees leave an organization while having the security of a permanent contract, this can be interpreted as high costs of leaving, whereas this security is more or less absent for employees with temporary contracts. This makes temporary contract employees more flexible, and thus adds to the expected positive relation between temporary contracts and external labor mobility. Altogether, the following hypothesis is derived:

> *H5A: Temporary contracts are positively associated with external labor mobility in the Dutch government.*

Moving on to the relation of temporary contracts with voluntary mobility, Booth, Francesconi and Frank (2002) deemed overtime work of temporary contract employees to be positively related to the transition to permanent contracts. They even considered temporary contracts to be so-called ‘stepping stones’ for permanent contracts. Basically, this once more underlines the preference of employees for permanent contracts, which contributes to the idea that temporary contracts are associated with voluntary rather than forced mobility. That is, temporary contract workers make extra efforts and are even willing to do unpaid overtime in order to acquire these permanent contracts. It can be assumed that the ‘stepping stone’-mechanism accounts for a significant share in the mobility for temporary contract workers and therefore, the following hypothesis with regard to voluntary external labor mobility is constructed:

> *H5B: Temporary contracts are positively associated with voluntary external labor mobility in the Dutch government.*

Since mobility for employees with a temporary contract is for the major part focused on acquiring a permanent contract, it can be assumed that these employees are not directly interested in upward

mobility. Therefore, they will be more inclined to accept any job opportunity, as long as this opportunity entails a permanent contract. Consequently, the following hypothesis is developed:

> *H5C: Temporary contracts are negatively associated with upward external labor mobility in the Dutch government.*

2.3.2 Work Hours

As stated earlier, ambition is the mechanism for the relationship between work hours and external labor mobility. Benschop, van de Brink, Doorewaard, and Leenders (2013) found that employers consider ambitious employees those who, among other things, take on extra tasks. These extra tasks are hours on top of the normal amount of hours, which is why a relatively high number of work hours are considered to be a reflection of a relatively high ambition of the employee. Benschop, et al (2013) considered ambition to be a resource for employees, since employers value this ambition. They argued that ambition is a resource that adds to organizational performance and therefore is a positive trait for employees. This claim is supported by Judge, et al (1994; p. 4), who state: *"ambitious people must achieve more to be satisfied than those with less ambition. This is what drives them to excel and improve"*. Employers are more inclined to hire excelling ambitious employees, which increases their opportunity in the labor market. Of course, the current employer does not want these excelling employees to leave and will therefore try to bind them to the organization. However, as with the effects of education, it is believed that for these excellent employees eventually job opportunities occur that exceed the offer of the current employer. Therefore, opportunities for those with many work hours lead to an increase in external labor mobility, resulting in the following hypothesis:

> *H6A: The amount of work hours is positively related to external labor mobility in the Dutch government.*

Given mobility and building on previous arguments, it can be argued that if an employee works more hours, he or she displays more ambition, and this ambition is more likely to result in more voluntary mobility. Ambitious employers are considered to be eager to search for other opportunities and are therefore more likely to encounter voluntary mobility. Also, Gesthuizen (2009) noticed that the amount of working hours is positively related to voluntary mobility. Therefore, the following is hypothesized with regard to voluntary external mobility:

> *H6B: The amount of work hours is positively related to voluntary external labor mobility in the Dutch government.*

According to Altonji & Paxson (1988), job opportunities with a high amount of work hours are only accepted if this entails a certain improvement compared to the previous situation. Considering

employees with many working hours are considered to be ambitious, this improvement is likely to concern a promotion. This leads to the following hypothesis:

> *H6C: The amount of work hours is positively related to upward external labor mobility in the Dutch government.*

2.3.3 Job Satisfaction

With regard to job satisfaction, motivation and ambition appear to play important roles for opportunities and constraints in the labor market. First, motivation is deemed well for explaining employee turnover based on satisfaction, because it is believed that satisfaction is a major determinant of motivation, which affects both intentions (Tett & Meyer, 1993) and actual behavior (Kanfer, 1990). If employees are satisfied, they will be motivated to maintain the situation as it is and therefore be constrained in the labor market. Because employees are satisfied with their current situation, they will be less inclined to actively search for job opportunities, which reduces their chances of external labor mobility. Maertz & Griffeth (2004) proposed a set of eight motivational factors to be influencing job mobility, of which three are deemed to be relevant for job satisfaction: 'affective forces', 'calculative forces', and 'constituent forces'.

Affective forces are associated with the emotional affections an employee has with his or her occupation. Maertz & Griffeth (2004) stated that people are 'hedonistic', which means that they tend to avoid bad situations and tend to maintain good situations. Therefore, if people are satisfied with for example the content and workload of their job, they will be more motivated and therefore more inclined to maintain the good situation. This can be interpreted as a constraint in the labor market for employees, and thus positive affection with the job leads to fewer transitions.

Calculative forces can be defined as to how employees perceive their ability to meet their goals and values (Maertz & Griffeth, 2004). The motivation of employees depends on the likelihood of actually meeting these goals and values. This dimension is of importance, because it might very well be that employees appreciate the emotional environment, but do for example feel constrained by limited internal career opportunities. If employees are indeed dissatisfied by the extent to which they can achieve their goals, they might turn to other organizations, which implies more external labor mobility.

Constituent forces involve the relationships of employees with their colleagues (Maertz & Griffeth, 2004). Reichers (1985) stated that it is even possible for employees to become committed to their colleagues, rather than to their job. Besides that, Raeve, et al. (2009) found conflict or bad relationships with superiors to be determining for external labor mobility. Therefore, it could be that satisfaction with either the job or the organization is due to strong relationships with colleagues and superiors. Satisfaction with these relationships spills over on satisfaction with the job, which increases

employee's motivation. Again, high levels of satisfaction and motivation constrain employers in the labor market, which supports the idea that the higher the satisfaction with the relationship with colleagues, the lower the likelihood of job transition.

Second, the mechanism of ambition applies to the relationship of job satisfaction and external labor mobility as well. Judge and Locke (1993) found that ambition is negatively associated with job satisfaction, which implies that ambitious employees are more often dissatisfied with their jobs than less ambitious employees. It was stated that *"ambitious people are fundamentally dissatisfied with where they are and constantly want to improve the conditions of their job in some significant way"* (Judge et al., 1994; p. 4). Low job satisfaction could therefore be an indicator of ambition, which is earlier argued to be positively related to opportunities in the labor market and therefore with labor mobility. Considering that ambitious employees are on average less satisfied with their jobs, this implies a negative relationship between job satisfaction and labor mobility. Consequently, both mechanisms point towards the following hypothesis:

H7A: Job satisfaction is negatively related to external labor mobility in the Dutch government.

Put simply, it is hypothesized that the more satisfied employees are, the less likely that they will be switching jobs. Therefore, if satisfied employees do switch jobs, it is unlikely that they initiate it themselves, which results in occurring mobility to be of an involuntary nature. This results in the following hypotheses:

H7B: Job satisfaction is negatively related to voluntary external labor mobility in the Dutch government.

The lower the satisfaction, the more employees are inclined to accept job offers that do not entail a promotion. That is, if they are satisfied and do change jobs, this must be an improvement relative to the previous situation. A promotion is usually associated with significant wage growth (McCue, 1996), which turns potential financial costs of leaving into financial gain. This could be a motivator for satisfied employees to consider the job transition. However, if no such gains are present, they are not likely to make a job transition. Since they are satisfied with their current situation, downward and lateral mobility become irrational options. This leads to the following hypothesis:

H7C: Job satisfaction is positively related to upward external labor mobility in the Dutch government.

Table 1 presents all derived hypotheses in a schematic overview. The model entails all hypotheses of the effects of personal and job factors on 1) external labor mobility, 2) voluntary external labor mobility, and 3) upward external labor mobility.

Table 1. Schematic overview of direct effects of personal and job factors of Dutch public servants on external mobility, voluntary external mobility and upward external mobility.

Independent Variables	DV: External Mobility	DV: Voluntary External Mobility	DV: Upward External Mobility
Personal Factors			
Education	+	+	+
Age	-	-	-
Female	-	-	-
Non-Dutch Ethnical Background	-	-	-
Job Factors			
Temporary Contract	+	+	-
Work Hours	+	+	+
Job Satisfaction	-	-	+

2.4 Moderator effects

Next to the previously hypothesized direct relations, it is also possible that some variables enhance or weaken initial relations. In this paragraph several of those relations are discussed. First, an effect of being a female public servant on the relationship of age with external labor mobility is explained. It will be argued that the mechanism of shifting priorities to family life at later age is especially applicable for female employees, resulting in gender as moderation of the relation between age and external mobility. Second, moderations on the relationship between working hours and external labor mobility are presented. It is argued that external labor mobility as a result of ambition is not rewarded the same for every employee, leading to moderations of gender and ethnicity.

2.4.1 Age and Gender

In previous sections it was argued that one of the mechanisms underlying the relationship between age and external labor mobility is shifting priorities to family life at later age. The idea is that when people grow older they will be more likely to develop the preference to spend time with their family, which reduces their inclination to switch jobs. In the following sections, several arguments are presented for explaining that this mechanism is particularly relevant for female employees. In other words, below, it will be argued that being a female employee enhances the initial negative relationship between age and external labor mobility.

First, an influential view in existing literature entails the notion that women have a certain desire to attain the ‘maternal role identity’ (Mercer, 2004; Johnston, Stefanie, Schurer, & Shields, 2014).

Basically, women have an ideal self that reflects certain qualities, traits and attitudes necessary for motherhood (Rubin, 1967), so when the preferences for family life develop for women, the focus on being a good mother develops simultaneously. This can be interpreted as an additional constraint for change, in this case job changes in particular, because women at later age are preoccupied with becoming a perfect version of the self. The absence of such an identity for men leads to an enhancement of the negative relationship between age and external labor mobility for women.

Second, although women over the years experienced an increase in labor market participation (Jaumotte, 2003; Lewis, 2001), they remain the primary caretakers in the household (Bittman & Wajcman, 2000). While having paid work, women, more often than men, still tend to be more busy with household labor and child care. Therefore, as age and child preferences increase, women are less inclined to accept job change. Women are more likely to be responsible for raising the children, which forms a constraint on the willingness of experiencing stress-imposing events such as job changes. While Craig & Sawrikar (2009) found this effect to disappear when children become adults, by then female employees already experienced a so-called domestic burden and maternal time stress, which made them for a significant long period of time more reluctant to job transition than men. Together, this leads to the following hypothesis:

> *H8A: Being a female public servant enhances the negative relationship between age and external labor mobility.*

Given that a female employee is mobile, it is not likely that this mobility is voluntary. As previously argued, the combination of the responsibility for children and job transition is undesired from the female employee's point of view. Therefore they will not be inclined to leave organizations voluntarily, from which it can be concluded that there might be an enhancing effect for female employees on the negative relationship between age and external voluntary mobility. This leads to the following hypothesis:

> *H8B: Being a female public servant enhances the negative relationship between age and voluntary external labor mobility.*

Given the fact that because of their domestic focus women, more than men, are at a later age more inclined to avoid stressful events, it is unlikely that when becoming older female employees will experience upward external mobility. That is, upward external mobility usually comes with more responsibility and is arguably more stressful than job change at lateral or lower level. Therefore the following hypothesis is constructed:

> *H8C: Being a female public servant enhances the negative relationship between age and upward external labor mobility.*

2.4.2 Work hours, Gender and Ethnicity

In one of the previous sections it was argued that the amount of working hours reflects an employee's ambition. While ambition undoubtedly includes eagerness for occupational status attainment, it also includes a desire for monetary gain (Kuijpers, Schyns & Scheerens, 2006). Besides, Ng, Eby, Sorensen, and Feldman (2005) distinguished two types of indicators for career success: objective and subjective career success. Subjective career success is measured by career satisfaction, whereas objective career success is measured by salary, occupational status, and promotion. If we consider ambition to be the desire for career success, then it can be argued that ambition is the desire for the attainment of salary, occupational status and career satisfaction as well.

The previous point is relevant because salary compensations for external labor mobility differ among employees (Brett & Stroh, 1997; Dreher & Cox, 2000; Dreher, Lee & Clerkin, 2011). The compensation advantage in terms of salary as a result of external labor mobility is stronger for men and for those without a minority ethnical background than for women and for those with a minority ethnic background. Considering the assumption that ambition serves as mechanism for the relationship between work hours and external labor mobility, it can be argued that this relation is weaker for female and ethnic minority employees. Ambitious female and non-native employees that make many working hours might have the opportunity for external labor mobility because the high amount of working hours reflects their ambition and therefore hard work, but they will be less inclined to change organizations because they are less likely to receive the monetary compensation that male employee and Dutch employees do receive. External labor mobility is therefore not necessarily beneficial for ambitious female and non-native employees, which leads to the following hypotheses:

> *H9A: Being a female public servant weakens the positive relationship between work hours and external labor mobility.*
>
> *H10A: Being a public servant with a non-Dutch ethnical background weakens the positive relationship between work hours and external labor mobility.*

Given mobility, ambitious employees are likely to experience voluntary external labor mobility. They will seek opportunities to achieve career success. However, building on the previous mechanism of differences in salary compensations, this might be less the case for female and non-native employees. For them, there is not as much to gain with voluntary external labor mobility as for the male and Dutch employees. They are therefore less likely to voluntarily leave the organization, leading to the following hypotheses:

> *H9B: Being a female public servant weakens the positive relationship between work hours and voluntary external labor mobility.*

H10B: Being a public servant with a non-Dutch ethnical background weakens the positive relationship between work hours and voluntary external labor mobility.

Since promotion itself is an indicator of career success, ambitious employees will have positive attitudes towards upward mobility. Therefore, ambitious female and non-native employees with many working hours will still be inclined to switch organizations because it directly concerns a step to career success. Therefore, it is believed that being a female or non-native public servants does not affect the relationship between work hours and upward external labor mobility.

3. Methods

3.1 Data

The data used for this study originates from the Personnel and Mobility Research (PoMo), commissioned by the ministry of the Interior and Kingdom Relations. It is a biannual survey carried out since 1999 containing a wide range of information on, among other things, labor mobility, employability, experiences of work, and superiors. Every wave has three datasets; one dataset concerns the inflowing employees, one the sitting employees, and one the departing employees. According to the ministry, this structure adds to the goal of this survey, which is to gain insight in the labor market position of the government.

For this study, data of sitting and departing government public servants for the years of 2010, 2012, and 2014 are combined. Important to mention is that this is cross-sectional data. It is not the case that the same respondents are followed over multiple years, so it is not a longitudinal study. More recent data from the year of 2016 does exist and is available, but suffers from the omission of relevant variables, which results in the judgment that it is unsuited for the scope of this thesis. Also, earlier data is available, but has been proven to be incompatible with the more recent years of 2010, 2012 and 2014. The survey is subject to change over the years, which makes these three years the only ones that contain all variables required for this research. After combining this data, some selections are made in order to fully match the data with the focus of the study. First, PoMo focuses on all Dutch civil servants, whereas this study merely focuses on civil servants employed at the government. Response rates of government civil servants in proportion of the sample and entire population are presented in Table 2. The population for the sitting personnel here is all sitting governmental public servants for the specific year and for the departing personnel all departing public servants for the specific year. The sample consists of the employees that have been approached to participate in the study. Second, PoMo datasets of departing personnel also include retirees. Retirement, being a different type of outflow, does not fit within the scope of these research and retired employees are therefore excluded from the analyses.

The combination of the data and the two selections result in a total sample of 12,333 employees. After excluding respondents with missing values on one of the variables, 11,977 employees are included in the analyses. For the analyses of the dependent variables ‘voluntary mobility’ and ‘promotion’ only the departing personnel of this sample is included, which comes down to a total of 1,555 employees.

Table 2. Response rates of the sitting and departing datasets of POMO for the years of 2010, 2012, and 2014.

Year	Type of Personnel	Population size	Sample size	Response (N)	Sample Response (%)	Population Response (%)
2010	Sitting	116,280	10,000	3,889	38.9	3.3
2010	Departing	5,882	4,000	1,177	29.4	20.0
2012	Sitting	117,009	10,937	3,266	29.9	2.8
2012	Departing	5,512	4,200	666	15.9	12.1
2014	Sitting	116,883	10,937	3,590	32.8	3.1
2014	Departing	4,912	4,200	1,183	28.2	24.1

Unfortunately, the measurements of job satisfaction over the years are not compatible with each other. In order to be able to analyze this variable to some extent, a separate analysis for the most recent year (2014) is carried out, with a total of 3,727 respondents. Details will be given in the analytical strategy section, but for now it is important to mention that these analyses are slightly handicapped, since only employees who voluntarily left the government reported their job satisfaction. Therefore, the analysis for the dependent variable 'outflow' only includes, besides the sitting personnel, voluntary outflowing personnel. The analysis for the dependent variable 'voluntary mobility' can therefore obviously not be conducted, and it has its consequences for the analysis for the dependent variable of 'promotion' which now merely has a limited number of respondents of 218.

3.2 Variables

Below, the operationalization of all variables for the analyses is described and the descriptive statistics of the created variables will be reported for both the overall sample and the sample of the separate 2014 analysis. The dependent variables will be described first, after which the independent and control variables are discussed.

3.2.1 Dependent variables

The first dependent variable, 'external labor mobility', was created by appointing sitting personnel a score of '0', meaning that they did not leave the government. Departing personnel was appointed a score of '1', meaning that they did experience external labor mobility. Overall, 13.2% of the respondents experienced external labor mobility. In the introduction it became clear that actual external mobility rates are substantially lower, meaning that external mobile respondents are overrepresented in this sample.

The second dependent variable, 'voluntary external labor mobility', was in all years measured by the following question: *"What was the main reason for ending your previous job?"* Varying answer categories of forced and voluntary mobility were present and all coded to a variable where a score of '0' means 'forced external labor mobility' and a score of '1' means 'voluntary external labor mobility'. The answer categories 'became unfit for work, 'ended temporary contract', 'fired because of a reorganization', and 'fired by employer' were considered to be forced mobility and having one of those reasons for leaving the government therefore means a score of '0' on the variable. The answer categories 'I resigned', 'I rejected the possibility to extend my temporary contract', and 'new job' were considered to be voluntary mobility and therefore have a score of '1' on the voluntary mobility variable. Overall, 60.3% of the included departed employees experienced voluntary mobility.

The third dependent variable, 'promotion', was in 2010 and 2014 measured by the following question: *"If you compare the level of your current function with the level of your previous function, which of the descriptions below is most applicable?"* Participants were able to choose from five answer categories: 'much lower than my previous function', 'a bit lower than my previous function', 'similar to my previous function', 'a bit higher than my previous function', and 'much higher than my previous function'. The first two answer categories represent a lower level of the new function compared to the old function, the third category represents a similar level, and the fourth and fifth a higher level. These categories were coded into a variable where a score of '0' means 'no higher level' and a score of 1 means 'a higher level'. All respondents having a new job with a higher level compared to their old job are considered to have made a promotion. In the 2012 survey, the measurement is slightly different. Two other questions were asked upon which the 'promotion' variable was based for this year, namely *"What is the level of your old job in comparison with the level of your education?"* and *"What is the level of your new job in comparison with the level of your education?"* For both questions, participants were provided five answer categories: 'much lower than my level of education', 'a bit lower than my level of education', 'similar to my level of education', 'a bit higher than my level of education', and 'much higher than my level of education'. If departed respondents reported a higher level in terms of education for their new job than for their old job, they were considered to have experienced a promotion. The differences in measurement are considered to be inferior to the added value of including 2012 in the analyses. Moreover, there are some differences in promotion between the years, but these are not extremely large, with in 2010 29.9% of the external mobile respondents experienced a promotion, 17.7% in 2012, and 23.5% in 2014. This can be seen as justification for adding the 2012 measurement in the analyses.

3.2.2 Independent variables

Starting with education (M=3.68, SD=1.04), this variable is in all years measured by the following question: *"What is your highest completed education?"* A score of '1' means respondents only

finished elementary school, '2' means they finished lower professional education (LBO/MAVO), '3' means they completed high school or middle professional education (HAVO/VWO/MBO), '4' means they have a college bachelors degree, and '5' means they have a college masters degree.

Age (M=48.25, SD=9.65) was measured by asking respondents the next question: *"What is your date of birth?*" Subsequently, the date of birth was subtracted from the date of measurement, resulting in the employees' age. Respondents younger than 15 were considered to be outliers and therefore removed from the analyses. Respondents older than 65 passed the retirement age and are considered very unlikely to be mobile at all. In order to be able to analyze the effects of the age of employees that are potentially prone to job changes, respondents older than 65 were excluded from the analyses.

In all years, respondents were asked for their gender as well. This resulted in a variable where a score of '0' indicates that the respondent is male, whereas a score of '1' indicates that the respondent is female. Overall, the sample consists for 39.1% out of women.

With regard to ethnicity, asking respondents for their ethnical background resulted in a variable with three categories. A score of '1' means the respondent has a Dutch ethnical background, a score of '2' means the respondent has a non-Dutch western ethnical background, and a score of '3' means the respondent has a non-Dutch non-western ethnical background. Because this is a nominal variable, dummy variables were created of all categories, resulting in three dummy variables where a score of '1' means the respondent has the specific ethnical background and a score of '0' means the respondent has one of the other two ethnical backgrounds. Overall, 84% of the respondents have a Dutch ethnical background, 10% of the respondents have a non-Dutch Western ethnical background and 6% of the respondents have a non-Dutch non-Western ethnical background.

The amount of work hours (M=34.22, SD=5.30) was simply measured by asking the following question: *"How many hours did you work, according to your appointment?"*

For contract type, the next question was asked: *"What kind of contract do you have?"* Respondents could answer that they either had a permanent or a temporary contract. For the temporary contract they could also mention whether they had a chance on acquiring a permanent contract in the near future or not. These two categories were combined into the category 'temporary contract', which is identified by a score of '1'. A score of '0' represents a permanent contract. Overall, merely 4.4% of the respondents have a temporary contract.

As stated before, job satisfaction is only measured for the sitting and the voluntary outflowing personnel. Job satisfaction was measured by measuring the satisfaction of the following twelve items: *(1) content of the job, (2) cooperation with colleagues, (3) degree of independence, (4) amount of work, (5) degree of orientation on results of the organization, (6) superior, (7) diffusion of information and communication, (8) career opportunities, (9) reward, (10) way of assessment, (11) degree of*

influence, (12) attention for personal well-being. Respondents had to report on a Likert Scale ranging from 1 till 5 to what extent they were satisfied with these items. All items were coded so that a higher score means a higher degree of satisfaction with the variable. Then, principal component analysis and factor analysis were carried out for both the entire 2014 sample and the sample with only departing personnel in order to examine whether suitable scales could be constructed.

First, looking at the correlation matrices of both samples it becomes clear that most variables are significantly associated with each other, with Pearson $r > .3$, $p < .001$. This is important, because the rule of thumb states that the correlations should all be at least above .3. For both samples, only the item 'reward' has multiple correlations below .3. Moving on to the Cronbach's alpha, in both samples a high Cronbach's alpha is displayed. For the entire 2014 sample α is .87, and for the sample of only departing personnel, α is .90. Factor analysis shows for both samples a single convincing component with an eigenvalue above 1. While for both factor analyses there is another component with an eigenvalue of higher than 1, for the analysis based on the entire sample there are no items that load on this factor. In the sample of departing personnel there is merely one item that loads on this component. The item 'reward' is the one that loads on this factor, while the other eleven items load on the first factor. However, if this item is deleted, the Cronbach's alpha does not change. Thus, there is no statistical reason to exclude this item from the scale and for the sake of including as much information as possible it is decided that 'reward' is not deleted from the analyses, resulting in a scale consisting of twelve items.

Altogether, this resulted in a scale of job satisfaction, with for the entire 2014 sample has M=3.46 and SD=.66. For the sample of the 2014 departing personnel the job satisfaction scale has M=3.32 and SD=.91.

3.2.3 Control variables

Differences in external labor mobility over the years could influence the results of the study. There is accounted for this by controlling for the effects of the years on the dependent variables. Dichotomous variables were created for 2010, 2012 and 2014, where a score of '0' means that the respondent did not participate in PoMo during that specific year and a score of '1' means that the respondent did participate in PoMo during that specific year. Overall, this resulted in 36.6% of the respondents participating in 2010 (N=4,388), 29.7% in 2012 (N=3,553) and 33.7% in 2014 (N=4,036)[1].

[1] Because it is cross-sectional data and the respondents are randomly selected every year, it is possible that some respondents participated in multiple years.

3.3 Descriptive statistics

The descriptive statistics of all variables are presented in Table 3. As mentioned earlier, separate analyses will be carried out for 2014 in order to be able to include the independent variable 'job satisfaction' in the analyses. Descriptive statistics of this particular sample are presented in Table 4.

Table 3. Descriptive statistics of all variables based on respondents participating in 2010, 2012 and 2014 combined (N sitting and departing personnel = 11,977, N departing personnel = 1,555).

	Sitting and departing personnel		Departing personnel	
	M	SD	M	SD
Dependent Variables				
External Mobility[a]	.13			
Voluntary Mobility[b]			.60	
Upward Mobility[c]			.25	
Personal Characteristics				
Education	3.68	1.04	3.98	1.02
Age	48.25	9.65	43.64	10.78
Female[d]	.39		.51	
Ethnicity				
Dutch[e]	.84		.82	
Non-Dutch Western[e]	.10		.10	
Non-Dutch Non-Western[e]	.06		.08	
Job Characteristics				
Work Hours	34.22	5.30	33.70	5.80
Temporary Contract[f]	.04		.24	
Control Variables				
2010[g]	.37		.47	
2012[g]	.30		.21	
2014[g]	.34		.32	

[a]Reference category = did not experience external labor mobility.
[b]Reference category = forced labor mobility.
[c]Reference category = downward or lateral labor mobility.
[d]Reference category = male.
[e]Reference category = not in displayed 'ethnical background' category.
[f]Reference category = permanent contract.
[g]Reference category = other year.

Table 4. Descriptive statistics of all variables based on respondents participating in 2014 (N sitting and departing personnel = 3,727, N departing personnel = 218).

	Sitting and departing personnel		Departing personnel	
	M	SD	M	SD
Dependent Variables				
External Mobility[a]	.06[2]			
Voluntary Mobility[b]			1	
Upward Mobility[c]			.35	
Personal Characteristics				
Education	3.67	1.04	4.26	0.88
Age	49.68	9.17	43.85	10.75
Female[d]	.37		.49	
Ethnicity				
Dutch[e]	.85		.85	
Non-Dutch Western[e]	.09		.10	
Non-Dutch Non-Western[e]	.06		.05	
Job Characteristics				
Work Hours	34.34	4.91	33.45	5.96
Temporary Contract[f]	.02		.12	
Job Satisfaction	3.46	0.66	3.32	0.91
Satisfaction with:				
Job Content	4.06	.90	3.28	1.33
Relation Colleagues	4.21	.84	3.81	1.25
Degree of Independence	4.35	.81	3.63	1.31
Amount of Work	3.61	1.05	3.73	1.22
Results-oriented organization	3.06	1.08	2.93	1.38
Superior	3.41	1.18	3.04	1.45
Information and communication	2.98	1.05	3.05	1.33
Career opportunities	2.92	1.05	2.75	1.32
Reward	3.19	1.11	3.55	1.26
Way of assessment	3.48	1.05	3.57	1.32
Degree of influence	3.07	1.02	3.07	1.32
Attention for well-being	3.16	1.13	3.39	1.34

[a]Reference category = did not experience external labor mobility.
[b]Reference category = forced labor mobility.
[c]Reference category = downward or lateral labor mobility.
[d]Reference category = male.
[e]Reference category = not in displayed 'ethnical background' category.
[f]Reference category = permanent contract.

[2] Note that this includes only those who experienced voluntary labor mobility, because only people who voluntarily left the government answered questions on job satisfaction. After listwise deletion only respondents with scores on all variables remain in the data, which excludes the forced mobility respondents which did not score on job satisfaction. This is also the reason that the proportion of voluntary mobility is '1'.

3.4 Analytical Strategy

The analytical strategy consists of two steps. First, bivariate analyses are conducted, for which important results are highlighted and interpreted. For the categorical variables 'gender', 'ethnical background', and 'temporary contract' chi-square tests are carried out, whereas for 'education', 'age', 'work hours', and 'job satisfaction' t-test with independent samples are executed. By doing this, potential bivariate relations between these variables and 1) external labor mobility, 2) voluntary external labor mobility, and 3) upward external labor mobility are scrutinized. As mentioned before, any relation of job satisfaction with voluntary external labor mobility cannot be analyzed, because respondents that experienced forced external labor mobility did not answer the questions regarding job satisfaction.

Second, a series of regression analyses are carried out. All regression analyses are logistic regressions, because all dependent variables are dichotomous variables. Not all regression analyses make use of the same sample. Two features together provide distinction in four different samples. First, different dependent variables result in different samples for the regression analyses. For the dependent variable of external labor mobility, both the sitting and the departing personnel have to be included, whereas for the dependent variables 'voluntary external labor mobility' and 'upward external labor mobility' only the departing personnel can be included. Second, since job satisfaction was only carried out in 2014, separate analyses are carried out for this year so that job satisfaction can still be analyzed, resulting in two more deviant samples. Table 5 provides an overview of the four samples.

Table 5. Samples and corresponding regression models.

Years	2010, 2012 and 2014	*Years*	2010, 2012 and 2014
Type of personnel	Sitting and departing	*Type of personnel*	Departing
N	11,977	*N*	1,555
Regression Analyses	Models 1-4	*Regression Analyses*	Models 5-12
Years	2014	*Years*	2014
Type of personnel	Sitting and departing	*Type of Personnel*	Departing
N	3,727	*N*	218
Regression Analyses	Model 13 and 15	*Regression Analyses*	Model 14 and 16

Now that the samples are further specified, it is possible to clarify which logistic regression analyses are conducted. Table 5 shows the varying samples on which the different regression analyses are based.

First, the direct effects of all independent and control variables on the dependent variable 'external labor mobility' are tested. This is done by first testing the effects of personal factors separately (Model 1), then job factors separately (Model 2) and, finally, all independent and control variables together

(Model 3). After mapping the direct effects, it is possible to include the interaction effects in order to analyze whether moderator effects are present (Model 4). These steps are repeated for the dependent variables ‘voluntary external labor mobility’ (Model 5-8) and ‘upward external labor mobility’ (Model 9-12), but then using the sample of departing personnel.

Up until this point, the independent variable ‘job satisfaction’ remains unstudied. Only respondents in 2014 score on this variable, which is why separate analyses for 2014 are carried out. In order to examine this, effects of all independent variables on ‘external labor mobility’ are directly included in Model 13, since it is of no significant added value to examine personal factors separately again. This is repeated for the dependent variable ‘upward external labor mobility (Model 14). It is not possible to do this for the dependent variable ‘voluntary external labor mobility’, because this sample only consists of respondents that left the government voluntarily.

Also, regression analyses are carried out that test the effects of the separate items of job satisfaction on both dependent variables. Model 15 is similar to Model 13, but the scale of job satisfaction is replaced for the twelve items of which the scale consists. Model 16 is similar to Model 14, but again the separate items are included in the analysis rather than the scale of job satisfaction.

4. Results

4.1 Bivariate Results

In this section, the results of the bivariate analyses are presented and interpreted. Table 6 shows the results regarding external labor mobility, Table 7 shows the results regarding voluntary external labor mobility, and Table 8 shows the results regarding upward external labor mobility.

Table 6 shows the mean differences in all independent variables between respondents that did not experience external labor mobility and respondents that did experience external labor mobility. Beginning with the personal factors, Table 6 shows that those who did experience external labor mobility have a significantly higher educational level (M=3.98, SD= 1.02) than those who did not experience external labor mobility (M=3.64, SD=1.04), with t(2105)=12.39, p<.001. Employees experiencing labor mobility are significantly younger (M=43.81, SD=10.83) than those who did not (M=48.92, SD=9.27), with t(1949)=-17.81, p<.001. Furthermore, more female (M=.17) than male (M=.11) employees significantly experienced external labor mobility, with χ^2=101.49, p<.001. With regard to ethnicity, the three different groups are independently compared to the other two groups. So, employees with a Dutch ethnical background significantly have lower external labor mobility (M=.15) than those with a non-Dutch background (M=.13), with χ^2=4.73, p=.03. Also, employees with a non-Dutch non-Western ethnical background significantly experience more external labor mobility (M=.17) than employees with a Dutch or non-Dutch Western ethnical background (M=.13), with χ^2=9.23, p=.002. For having a non-Dutch Western ethnical background no significant differences in external labor mobility were found.

Shifting to job factors, significant results were found for differences in external labor mobility for both having a temporary contract and the amount of work hours. Employees with a temporary contract experienced significantly more external labor mobility (M=.72) than employees with a permanent contract (M=.11), with χ^2=1648.54, p<.001. Also, those who experienced external labor mobility had significantly less work hours (M=33.71, SD=5.78) than those who did not experience external labor mobility (M=34.29, SD=5.32), with t(1994)=-3.79, p<.001.

Table 7 presents all mean differences in independent variables between employees that experienced voluntary external labor mobility and employees that experienced forced external labor mobility. Starting with personal factors, significant differences in means were found for education, age and ethnicity. For gender no significant difference in means was found between those who experienced voluntary external labor mobility and those who experienced forced external labor mobility.

Table 6. Independent sample T-tests and Chi-Square tests for mean differences in external labor mobility, with sitting and departing respondents in 2010, 2012, and 2014 (N=11,977).

		T-test		Chi-Square Test	
	Mean Difference[a] (SE Difference)	DF	T	DF	χ^2
Personal Factors					
Education	.34 (.03)	2,105	12.39***		
Age	-5.11 (.29)	1,949	-17.81***		
Female[b]	.06			1	101.49***
Ethnicity					
Dutch[c]	-.02			1	4.73*
Non- Dutch Western[c]	.00			1	.05
Non-Dutch Non-Western[c]	.04			1	9.23**
Job Factors					
Temporary Contract[d]	.61			1	1648.54***
Work Hours	-.58 (.15)	1,994	-3.79***		

*P<.05, **P<.01, ***P<.001.
[a]Reference category = did not experience external labor mobility.
[b]Reference category = male.
[c]Reference category = not in displayed 'ethnical background' category.
[d]Reference category = permanent contract.

With regard to education, voluntary external mobile employees significantly have a higher level of education (M=4.19, SD=.93) than forced external mobile employees (M=3.67, SD=1.08), with t(1181)=9.98, p<.001. Also, voluntary external mobile employees are significantly younger (M=42.29, SD=9.96) than forced external mobile employees (M=45.70, SD=11.62), with t(1175)=-5.99, p<.001. With regard to ethnicity, employees with a Dutch background significantly experience more voluntary external labor mobility (M=.62) than employees with a non-Dutch ethnical background (M=.52), with χ^2=12.08, p=.001. Employees with a non-Dutch Western ethnical background significantly experience less voluntary mobility (M=.47) than the other ethnic groups (M=.39), with χ^2=4.06, p=.04. Employees with a non-Dutch non-Western ethnical background also significantly experience less voluntary mobility (M=.49) than the other ethnic groups (M=.61), with χ^2=7.33, p=.007.

Shifting to job factors, a significant difference in means between employees experiencing voluntary labor mobility and employees experiencing forced external labor mobility was found for having a temporary contract, but not for the amount of working hours. Employees with a temporary contract significantly experience less voluntary external labor mobility (M=.26) than employees with a permanent contract (M=.71), with χ^2=239.40, p<.001.

Table 7. Independent sample T-tests and Chi-Square tests for mean differences in voluntary external labor mobility, with departing respondents in 2010, 2012, and 2014 (N=1,555).

		T-test		Chi-Square Test	
	Mean Difference[a] (SE Difference)	DF	T	DF	χ^2
Personal Factors					
Education	.53 (.05)	1,181	9.98***		
Age	-3.41 (.57)	1,175	-5.99***		
Female[b]	.04			1	3.20
Ethnicity					
Dutch[c]	.11			1	12.08**
Non- Dutch Western[c]	-.08			1	4.06*
Non-Dutch Non-Western[c]	-.13			1	7.33**
Job Factors					
Temporary Contract[d]	-.45			1	239.40***
Work Hours	-.23 (.30)	1,553	-.77		

*P<.05, **P<.01, ***P<.001.
[a]Reference category = experienced forced external labor mobility.
[b]Reference category = male.
[c]Reference category = not in displayed 'ethnical background' category.
[d]Reference category = permanent contract.

Table 8 shows the results of the analyses for differences in means of all independent variables between employees who experienced upward external labor mobility and employees who experienced downward or lateral external labor mobility. Starting with personal factors, significant differences in means were found for education and age, but not for gender and ethnicity. With regard to education, employees experiencing upward external labor mobility have a significantly higher level of education (M=4.23, SD=.88) than employees who experienced lateral or downward external labor mobility (M=3.90, SD=1.05), with t(797)=6.10, p<.001. Employees experiencing upward external labor mobility are significantly younger (M=40.66, SD=9.77) than employees who experienced lateral or downward external labor mobility (M=44.65, SD=10.92), with t(748)=-6.79, p<.001.

Considering job factors, a significant difference in means between employees experiencing upward external labor mobility and employees experiencing downward or lateral external labor mobility was found for having a temporary contract, but not for the amount of working hours. Employees with a temporary contract significantly experienced less upward external mobility (M=.18) than those who experienced downward or lateral external mobility (M=.28), with χ^2=14.59, p<.001.

Table 8. Independent sample T-tests and Chi-Square tests for mean differences in upward external labor mobility, with departing respondents in 2010, 2012, and 2014 (N=1,555).

		T-test		Chi-Square Test	
	Mean Difference[a] (SE Difference)	DF	T	DF	χ^2
Personal Factors					
Education	.33 (.05)	797	6.10***		
Age	-3.99 (.59)	748	-6.79***		
Female[b]	.03			1	1.60
Ethnicity					
Dutch[c]	.02			1	.42
Non- Dutch Western[c]	.00			1	.04
Non-Dutch Non-Western[c]	-.04			1	1.00
Job Factors					
Temporary Contract[d]	-.10			1	14.59***
Work Hours	.56	723	1.73		

*P<.05, **P<.01, ***P<.001.
[a]Reference category = experienced downward or lateral external labor mobility.
[b]Reference category = male.
[c]Reference category = not in displayed 'ethnical background' category.
[d]Reference category = permanent contract.

In order to find differences in means for job satisfaction between employees who experienced external labor mobility and employees who did not experience external labor mobility, separate analyses were carried out using only respondents who participated in 2014 (N=3,727). Employees experiencing external labor mobility are significantly less satisfied with their job (M=3.29, SD=.94) than those who did not experience external labor mobility (M=3.49, SD=.64), with t(230)=-3.10, p=.002. No significant differences in means of job satisfaction between those who experienced upward external labor mobility and those who experienced lateral or downward external labor mobility were found.

4.2 Multivariate Results

Before presenting the multivariate results, it is important to mention that in all logistic regression models the effects are reported based on odds ratios. An odds ratio is a relative measure of effect, which compares categories within the independent variable with each other. For example, if female is coded in the variable gender as '1' and male is coded as '0', then an odds ratio of the effect of gender on a dependent variable of above 1 implies that being female is positively related to the dependent variable, whereas an odds ratio below 1 implies a negative relationship of being female. Below, multivariate results of logistic regression analyses are presented for the dependent variables external labor mobility, voluntary external labor mobility, and upward external labor mobility. Also, the

multivariate effects of the job satisfaction on external labor mobility and upward external labor mobility are analyzed.

4.2.1 External labor mobility

Table 9 presents the results of the logistic regression analyses with sitting and departing personnel that participated in 2010, 2012, and 2014, with the dependent variable external labor mobility. Model 1 includes the effects of personal factors on external labor mobility when potential effects of other independent variables are neglected. This model significantly explains 7% of the variance in external labor mobility, with χ^2=478.27, p<.001. Model 2 shows the effects of job factors on external labor mobility, significantly explaining 15% of the variance, with χ^2=1030, p<.001. Considering that Model 2 explains more than twice as much of the variance than Model 1, it can be derived that the included job factors are more important for determining external labor mobility than the included personal factors. Model 3 includes personal factors, job factors, and controls for in which year the respondent participated in the study, thereby significantly explaining 19% of the variance in external labor mobility, with χ^2=1303.61, p<.001. Model 4 is similar to Model 3, but with the addition of the moderator variables, still explaining 19% of the variance, with χ^2=13.44, p=.009. Because it does not explain more variance than Model 3, Model 4 is not better suited for explaining external labor mobility. Below, the effects of the independent variables on external labor mobility are discussed.

Starting with the effects of education, Model 1 shows that employees having a higher education are more likely to experience external labor mobility (*OR*=1.28, p<.001). This effect remains when job factors and control variables are added in Model 3, with *OR*=1.27, p<.001. These results are therefore considered to be proof for the notion that hypothesis H1A cannot be rejected. Thus, having a higher education increases the likelihood for public servants to leave the Dutch government.

For age, Model 1 shows a significant negative association with external labor mobility, with *OR*=.96, p<.001. This negative effect remains in Model 3, with *OR*=.98, p<.001. That is, the older employees become, the less likely they are to leave the government, which is considered to be support for that hypothesis H2A can be confirmed.

With regard to the relation between being a female public servant and external labor mobility, Model 1 and Model 3 show exact opposite effects of what was hypothesized. Model 1 shows that being a female public servant is significantly positively associated with external labor mobility, with *OR*=1.36, p<.001. Although the effect size is slightly decreased, the association remains negative in Model 3, with *OR*=1.35, p<.001. Where it was hypothesized that female public servants are less likely to experience external labor mobility, these results imply that female public servants are actually more likely to leave the government. Therefore it is necessary to reject hypothesis H3A.

Table 9. Logistic Regression analyses with dependent variable *external labor mobility*[a,] with sitting and departing respondents in 2010, 2012, and 2014.

	Model 1	Model 2	Model 3	Model 4
	OR (CI)	*OR* (CI)	*OR* (CI)	*OR* (CI)
Constant	.39***	.19***	.22***	.51***
Personal Factors				
Education	1.28 (1.21-1.35)***		1.27 (1.19-1.34)***	1.27 (1.20-1.35)***
Age	.96 (.95-.96)***		.98 (.97-.98)***	.97 (.96-.97)***
Female[b]	1.36 (1.22-1.52)***		1.35 (1.18-1.53)***	.31 (.11-.93)*
Ethnicity				
Western[c]	1.03 (.86-1.23)		.92 (.76-1.12)	.73 (.19-2.75)
Non-Western[c]	1.14 (.92-1.40)		1.00 (.79-1.26)	.67 (.16-2.92)
Job Factors				
Temporary Contract[d]		21.30 (17.46-25.98)***	15.46 (12.56-19.03)***	15.41 (12.52-18.98)***
Work Hours		.99 (.98-1.00)**	.99 (.98-1.00)	.98 (.96-1.00)
Control Variables				
2012[e]			.55 (.47-.64)***	.55 (.47-.64)***
2014[e]			.83 (.73-.95)**	.83 (.73-.95)**
Moderators				
Age*Female				1.02 (1.01-1.03)***
Work Hours*Female				1.01 (.99-1.04)
Work Hours*Western				1.01 (.97-1.05)
Work Hours* Non-Western				1.01 (.97-1.06)
N	11,977	11,977	11,977	11,977
-2 Loglikelihood	8871.79	8320.06	8046.45	8033.01
Pseudo R^2	.07	.15	.19	.19
χ^2	478.27***	1030***	1303.61***	13.44**

*P<.05, **P<.01, ***P<.001.
Correlations between all variables are estimated in order to check for multicollinearity. An inspection of the matrix leads to the conclusion that multicollinearity is not a problem in these analyses. The matrix can be found in Appendix A.
[a]Reference category = did not experience external labor mobility.
[b]Reference category = male.
[c]Reference category = Dutch background.
[d]Reference category = permanent contract.
[e]Reference category = 2010.

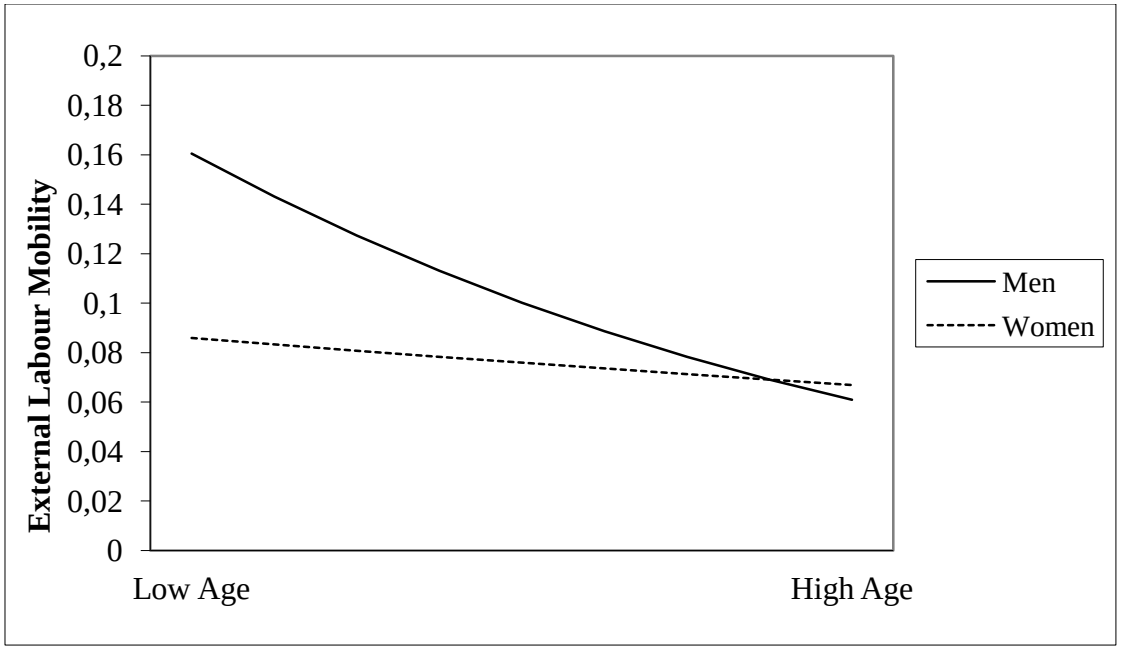
For ethnicity, no significant associations with external labor mobility were found and it is therefore necessary to reject hypothesis H4A as well.

Shifting to job factors, a significant positive association was found for the effect of having a temporary contract on external labor mobility. Model 2 shows that employees with a temporary contract are more likely to leave the government than those with a permanent contract (*OR*=21.30, p<.001). This effect remains in Model 3, with *OR*=15.46, p<.001 and these results are therefore considered to be sufficient ground for confirming hypothesis H5A.

In Model 2, a significant negative association between work hours and external labor mobility is found, with *OR*=.99, p=.01. In Model 3 however, this effect does not remain, so the amount of work hours has no significant effect on external labor mobility when personal factors and job factors are included in the analysis. Therefore, hypothesis H6A is rejected.

Then, Model 4 presents the effects of the moderator variables. The only significant effect here, is the moderation effect of being a female public servant on the relationship between age and external labor mobility, with *OR*=1.02, p<.001. In order to properly interpret this moderator, the interaction effect is plotted and displayed in Figure 1. From the Figure it can be derived that for women as age increases external labor mobility merely slightly decreases. However, looking at male employees, it becomes clear that this effect is much stronger. Over the lifespan, male public servants have more decline in external labor mobility than female public servants. Because this is the opposite of what was hypothesized, hypothesis H8A is rejected. Furthermore, no other significant moderator effects were found, so hypothesis H9A and H10A are rejected.

Figure 1. Moderating effect of female on the relation between age and external labor mobility.



4.2.2 Voluntary external labor mobility

Table 10 shows the results of the logistic regression analyses including merely departing personnel that participated in 2010, 2012, and 2014, with voluntary external labor mobility as dependent variable. The structure of the Models is similar to the structure of the Models for the analysis of external labor mobility as dependent variable. From the Table it can be derived that Model 5, including only personal factors, significantly explains 11% of the variance, with χ^2=131.04, p<.001. Model 6, including only job factors, significantly explains 20% of the variance, with χ^2=241.52,

p<.001. Again, job factors explain more variance than personal factors, and therefore job factors appear to be better suited for explaining voluntary external labor mobility as well. Model 7, including all independent and control variables, significantly explains 39% of the variance in voluntary external labor mobility, with χ^2=528.10, p<.001. Model 8, including all independent variables, control variables, and moderator variables, significantly explains 40% of the variance, with χ^2=9.88, p=.043. The differences in explained variance between Model 7 and Model 8 are marginal, and therefore it cannot be stated that Model 8 is a better model for explaining voluntary external labor mobility.

With regard to education, Model 5 shows that employees with a higher education are more likely to experience voluntary rather than forced external labor mobility (*OR*=1.59, p<.001). This result remains in Model 7, with *OR*=1.78, p<.001, which is a confirmation for hypothesis H1B.

Model 5 also shows a significant negative relation between age and voluntary external labor mobility, with *OR*=.98, p<.001. This significant negative association is also found in Model 7, with *OR*=.94, p<.001. These results imply that as the age of employees increases, they are less likely to voluntarily switch organizations, and therefore hypothesis H2B cannot be rejected.

Model 5 and Model 7 show that being a female public servant is not significantly related to experiencing voluntary external labor mobility. Therefore, hypothesis H3B is rejected. Then, shifting to ethnicity significant negative effects were found in Model 5. Because here having a Dutch ethnical background is the reference category, the significant negative association of having a non-Dutch western ethnical background with voluntary labor mobility (*OR*=.64, p=.013) implies that employees with a non-Dutch western ethnical background are more likely to experience forced labor mobility than those with a Dutch ethnical background. A similar effect was found for having a non-Dutch non-western ethnical background, with *OR*=.53, p=.001. However, both effects vanish if all variables are included in the analysis in Model 7, which leads to the rejection of hypothesis H4B.

With regard to job factors, in Model 6 a significant negative relation was found between having a temporary contract and experiencing voluntary external labor mobility, with *OR*=.14, p<.001. Model 7 also showed that having a temporary contract increases the likelihood of forced external labor mobility and reduced the likelihood of voluntary external labor mobility (*OR*=.06, p<.001). This means that employees with a temporary contract are less likely to voluntarily switch organizations than employees with a permanent contract. Thus, considering that these results are the exact opposite of what was hypothesized, hypothesis H5B must be rejected.

Table 10. Logistic Regression analyses with dependent variable *voluntary external labor mobility*[a], with departing respondents in 2010, 2012, and 2014.

	Model 5	Model 6	Model 7	Model 8
	OR (CI)	*OR* (CI)	*OR* (CI)	*OR* (CI)
Constant	.63***	4.19***	23.71***	5.03
Personal Factors				
Education	1.59 (1.43-1.77)***		1.78 (1.57-2.02)***	1.79 (1.58-2.03)***
Age	.98 (.97-.99)***		.94 (.93-.95)***	.95 (.93-.97)***
Female[b]	1.15 (.93-1.42)		1.08 (.83-1.41)	19.27 (2.26-164.07)**
Ethnicity				
Western[c]	.64 (.45-.91)*		.85 (.57-1.28)	.11 (.01-2.12)
Non-Western[c]	.53 (.36-.78)**		.69 (.43-1.10)	.33 (.02-6.25)
Job Factors				
Temporary Contract[d]		.14 (.11-.19)***	.06 (.04-.08)***	.06 (.04-.08)***
Work Hours		.99 (.97-1.00)	.97 (.95-.99)**	1.00 (.96-1.04)
Control Variables				
2012[e]			.47 (.34-.65)***	.48 (.35-.66)***
2014[e]			.49 (.37-.64)***	.48 (.36-.64)***
Moderators				
Age*Female				.98 (.95-1.00)*
Work Hours*Female				.95 (.90-1.00)*
Work Hours*Western				1.06 (.98-1.16)
Work Hours* Non-Western				1.02 (.94-1.11
N	1,555	1,555	1,555	1,555
-2 Loglikelihood	1957.91	1847.43	1560.85	1550.97
Pseudo R^2	.11	.20	.39	.40
χ^2	131.04***	241.52***	528.10***	9.88*

*P<.05, **P<.01, ***P<.001.
Correlations between all variables are estimated in order to check for multicollinearity. An inspection of the matrix leads to the conclusion that multicollinearity is not a problem in these analyses. The matrix can be found in Appendix A.
[a]Reference category = experienced forced external labor mobility.
[b]Reference category = male.
[c]Reference category = Dutch background.
[d]Reference category = permanent contract.
[e]Reference category = 2010.

For the relation between work hours and voluntary external mobility, no significant relation is found in Model 6. However, when all independent variables and control variables are included in Model 7, a significant negative relation is found, with *OR*=.97, p=.007. In order to be able to understand why this effect is significant in Model 7, but not in Model 6, new regression analyses were carried out where all variables were one by one added to Model 6. It became clear that the effect of working hours becomes significant if education is added (*OR*=.98, p=.013) and if age is added (*OR*=.98, p=.017). After seeing that multicollinearity is not an issue here, it is possible that working hours on itself explains too little

of the variance in voluntary external labor mobility, but that adding age and education reveals the previously masked effect of working hours on the dependent variable. A possible interpretation of the results in Model 7 implies that employees with more working hours are less inclined to voluntarily leave the government. Either way, the exact opposite was hypothesized, which results in rejecting hypothesis H6B.

Then, Model 8 tests the moderator effects. Of the included moderators, significant results were found for gender moderating the relation of age with voluntary external labor mobility (*OR*=.98, p=.046), and for gender moderating the relation of work hours with voluntary external labor mobility (*OR*=.95, p=.044). Looking at Figure 2, it can be concluded that decreasing voluntary external labor mobility over the life span is stronger for women than for men. This is in line with hypothesis H8B, which is therefore confirmed. Looking at the moderating effect of female on the relation between work hours and voluntary external mobility in Figure 3, it becomes clear that as women work more the decrease in external labor mobility is stronger than for men that work more. This contradicts hypothesis H9B, which is therefore rejected. Since no significant moderator effect of having a non-Dutch ethnical background on the relation between work hours and voluntary external labor mobility was found, hypothesis H10B is also rejected.

Figure 2. Moderating effect of female on the relation between age and voluntary external labor mobility.

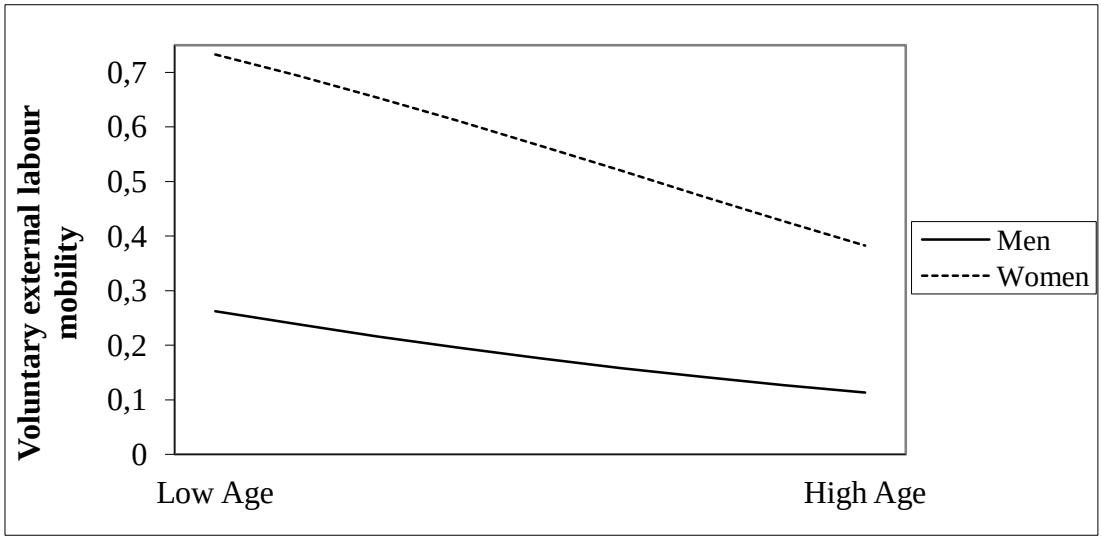
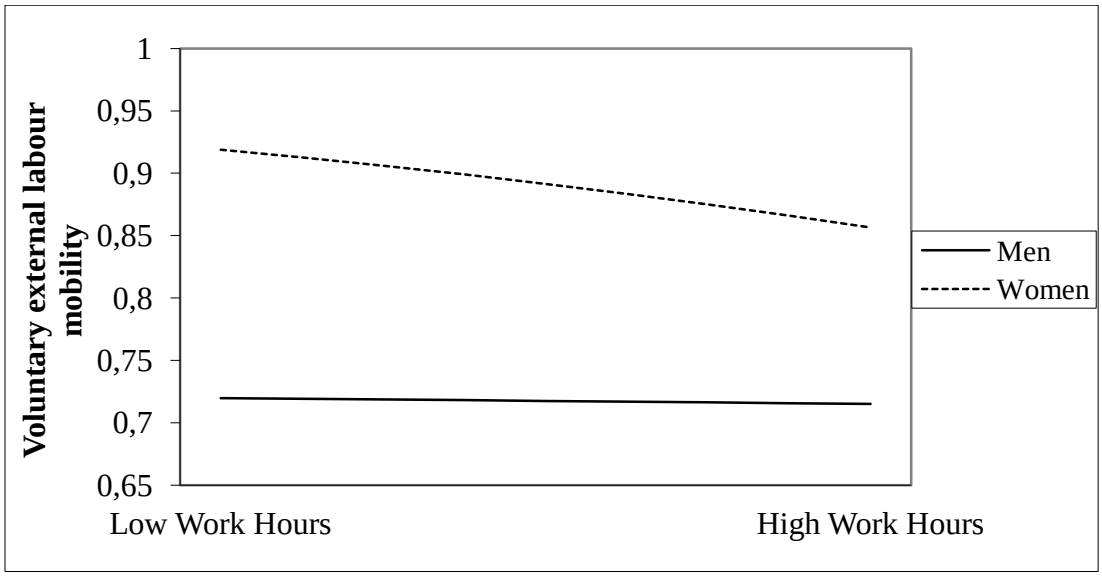


Figure 3. Moderating effect of female on the relation between work hours and voluntary external labor mobility.



4.2.3 Upward external labor mobility

Table 11 shows the results of the logistic regression analyses including merely departing personnel that participated in 2010, 2012, and 2014, with upward external labor mobility as dependent variable. Again, the structure of the Models is similar to the previous Tables. Model 9 explains 6% of the variance in upward external labor mobility, with χ^2=62.03, p<.001. Model 10 explains 2% of the variance, with χ^2=17.79, p<.001. In this model it is clear that personal factors explain more of the variance and therefore are better at determining upward external labor mobility than job factors. Model 11 explains 10% of the variance, with χ^2=113.54, p<.001. Thus, we see that the first three Models do significantly explain a certain variance in the dependent variable, but Model 12 does not explain more variance than Model 11, with χ^2=2.98, p>.05. This means that including the moderator effects in the analysis is of no significant added value for explaining upward external labor mobility.

Beginning with education, looking at Table 11 it becomes clear that in Model 9 a significant positive relation is found for having a high education with upward external labor mobility, with *OR*=1.31, p<.001. This relation remains when all independent and control variables are included in Model 11, with *OR*=1.29, p<.001. Thus, employees with a higher education seem to be more likely to experience upward external labor mobility rather than downward or lateral external labor mobility and therefore hypothesis H1C cannot be rejected.

For age, Model 9 presents a significant negative relationship with upward external labor mobility, with *OR*=.97, p<.001. This effect holds in Model 11, with *OR*=.96, p<.001. These results imply that if older employees do change organizations, they are less likely to experience a promotion, and therefore hypothesis H2C cannot be rejected.

Table 11. Logistic Regression analyses with dependent variable *upward external labor mobility*[a], with departing respondents in 2010, 2012, and 2014.

	Model 9	Model 10	Model 11	Model 12
	OR (CI)	*OR* (CI)	*OR* (CI)	*OR* (CI)
Constant	.42*	.22***	.72	.23
Personal Factors				
Education	1.31 (1.15-1.48)***		1.29 (1.13-1.46)***	1.29 (1.14-1.47)***
Age	.97 (.96-.98)***		.96 (.95-.97)***	.97 (.95-.98)***
Female[b]	1.05 (.83-1.33)		1.09 (.84-1.41)	6.80 (.68-68.63)
Ethnicity				
Western[c]	.99 (.67-1.46)		1.10 (.74-1.64)	.67 (.03-14.35)
Non-Western[c]	.72 (.45-1.14)		.81 (.50-1.30)	.59 (.03-13.11)
Job Factors				
Temporary Contract[d]		.57 (.43-.77)***	.40 (.29-.55)***	.40 (.29-.55)***
Work Hours		1.02 (.1.00-1.04)	1.01 (.99-1.03)	1.03 (.98-1.09)
Control Variables				
2012[e]			.54 (.39-.76)***	.55 (.39-.76)***
2014[e]			.83 (.64-1.09)	.83 (.64-1.09)
Moderators				
Age*Female				.99 (.96-1.01)
Work Hours*Female				.97 (.91-1.02)
Work Hours*Western				1.01 (.93-1.11)
Work Hours* Non-Western				1.01 (.92-1.10)
N	1,555	1,555	1,555	1,555
-2 Loglikelihood	1696.11	1740.35	1644.60	1641.61
Pseudo R^2	.06	.02	.10	.11
χ^2	62.03***	17.79***	113.54***	2.98

*P<.05, **P<.01, ***P<.001.
Correlations between all variables are estimated in order to check for multicollinearity. An inspection of the matrix leads to the conclusion that multicollinearity is not a problem in these analyses. The matrix can be found in Appendix A.
[a]Reference category = experienced downward or lateral external labor mobility.
[b]Reference category = male.
[c]Reference category = Dutch background.
[d]Reference category = permanent contract.
[e]Reference category = 2010.

For both being a female public servant and being a public servant with a non-Dutch ethnical background no significant relations where found with upward external labor mobility. Therefore both hypothesis H3C and H4C are rejected.

Looking at the effects of job factors on upward external labor mobility, Model 9 shows that employees with a temporary contract are less likely to experience a promotion rather than downward or lateral labor mobility (*OR*=.57, p<.001). This effect remains significantly negative when the personal factors and control variables are included in the analysis, with *OR*=.40, p<.001. This is considered to be support for the confirmation of hypothesis H5C. Furthermore, no significant effect of the number of

working hours on upward external labor mobility was found, which leads to the rejection of hypothesis H6C.

As stated above, Model 12 does not significantly explain more variance in upward external labor mobility than Model 11. Furthermore, as can be derived from Model 12, all moderator variables do not have a significant effect. Therefore, hypothesis H8C is rejected.

4.2.4 Job Satisfaction

Table 12 shows the results of 1) a logistic regression analysis including both sitting and departing respondents participating in 2014 with external labor mobility as dependent variable, and 2) a logistic regression analysis including merely departing respondents participating in 2014 with upward external labor mobility as dependent variable. Model 13 includes all independent variables that together significantly explain 14% of the variance in external labor mobility, with χ^2= 194.51, p<.001. Model 14 does not significantly explain any of the variance in the dependent variable upward external labor mobility (χ^2=15.12, p>.05).

Note that these sections only include the effects of this specific independent variable, since these analyses were carried out in order to test the hypotheses regarding job satisfaction and all other independent variables are already interpreted in an earlier stage. Looking at Model 13, it becomes clear that there is a significant negative relationship between job satisfaction and external labor mobility, with *OR*=.71, p<.001. In other words, employees that are more satisfied with their jobs are less inclined to leave the government, which leads to the confirmation of hypothesis H7A. Looking at Model 14, it becomes clear that there is no significant relationship between job satisfaction and upward external labor mobility and therefore hypothesis H7C is rejected. Unfortunately, it was impossible to test hypothesis H7B and thus no remarks can be made on whether this hypothesis should be confirmed or rejected.

Table 13 includes Model 15 and Model 16 that respectively test the effects of the twelve items of job satisfaction separately on external labor mobility and upward external labor mobility. All other independent variables were included in the analyses as well, but because earlier on attention was paid to the effects of these variables, only the effects of the job satisfaction items are displayed. Model 15 shows that satisfaction with job content (*OR*=.50, p<.001), the relation with colleagues (*OR*=.78, p=.012), the degree of independence (*OR*=.45, p<.001), the relation with the superior (*OR*=.68, p<.001), and career opportunities (*OR*=.79, p=.008) are all significantly negatively related to external labor mobility. In brief, this means that if employees are more satisfied with the job content, colleagues, independence, superior, and career opportunities, then they are less likely to leave the Dutch government. On the other hand, Model 15 also shows that satisfaction with the amount of work (*OR*=1.98, p<.001), information and communication (*OR*=1.25, p=.029), reward (*OR*=1.25, p=.013),

way of assessment (*OR*=1.40, p=.002), degree of influence (*OR*=1.44, p=.001), and attention for well-being (*OR*=1.40, p=.001) is all negatively related to experiencing promotion. These are striking results, since it entails that if employees are more satisfied with these items, they will be more likely to leave the government. Furthermore, the orientation of results of the organization (*OR*=.88, p>.05) seems to have no effect on whether employees leave the government or not.

Looking at upward external labor mobility, Model 16 shows that the more employees are satisfied with their job content (*OR*=.65, p=.007) and with their reward (*OR*=.70, p=.031), the less likely it is that they will experience a promotion. On the other hand, Model 16 also shows that being more satisfied with the way of assessment results in a higher chance of experience upward external labor mobility, with *OR*=1.79, p=.004.

Table 12. Logistic regressions with dependent variables *external labor mobility* and *upward external labor mobility*, with sitting and departing respondents in 2014.

	DV: External Labor Mobility[a]	**DV: Upward External Labor Mobility[b]**
	Model 13	Model 14
	OR (CI)	*OR* (CI)
Constant	.65	.11
Personal Factors		
Education	1.79 (1.51-2.11)***	.95 (.67-1.35)
Age	.96 (.94-.97)***	.99(.96-1.02)
Female[c]	1.07 (.78-1.48)	1.94 (1.01-3.71)*
Ethnicity		
Western[d]	1.08 (.67-1.74)	1.35 (.52-3.52)
Non-Western[d]	.65 (.32-1.32)	.65 (.16-2.73)
Job Factors		
Temporary Contract[e]	5.90 (3.28-10.63)***	1.28 (.50-3.24)
Work Hours	.96 (.93-99)**	1.09 (1.02-1.16)*
Job satisfaction	.71 (.57-.87)**	.79 (.57-1.10)
N	3,727	218
-2 Loglikelihood	1466.23	266.79
Pseudo R^2	.14	.09
χ^2	194.51***	15.12

*P<.05, **P<.01, ***P<.001.

Correlations between all variables are estimated in order to check for multicollinearity. An inspection of the matrix leads to the conclusion that multicollinearity is not a problem in these analyses. The matrix can be found in Appendix A.

[a]Reference category = did not experience external labor mobility

[b]Reference category = experienced downward or lateral external labor mobility.

[c]Reference category = male.

[d]Reference category = Dutch background.

[e]Reference category = permanent contract.

Table 13. Logistic regression with dependent variables *external labor mobility* and *upward external labor mobility*, with sitting and departing respondents in 2014.

		DV: External Labor Mobility[a]	**DV: Upward External Labor Mobility[b]**
		Model 15	Model 16
		OR (CI)	*OR* (CI)
Satisfaction with			
	Job Content	.50 (.42-.61)***	.65 (.48-.89)**
	Relation Colleagues	.78 (.64-.95)*	1.23 (.87-1.73)
	Degree of Independence	.45 (.37-.55)***	.98 (.71-1.36)
	Amount of Work	1.95 (1.59-2.39)***	.88 (.62-1.24)
	Results-oriented organization	.88 (.73-1.07)	1.15 (.81-1.64)
	Superior	.68 (.56-.81)***	.77 (.54-1.09)
	Information and communication	1.25 (1.02-1.53)*	.84 (.56-1.27)
	Career opportunities	.79 (.66-.94)**	.85 (.62-1.16)
	Reward	1.25 (1.05-1.49)*	.70 (.50-.97)*
	Way of assessment	1.40 (1.13-1.74)**	1.79 (1.20-2.68)**
	Degree of influence	1.44 (1.17-1.78)**	.89 (.62-1.28)
	Attention for well-being	1.40 (1.14-1.70)**	1.32 (.90-1.94)
N		3,727	218
-2 Loglikelihood		1167.12	237.85
Pseudo R^2		.35	.25
χ^2		493.62***	44.07**

*P<.05, **P<.01, ***P<.001.

[a]Reference category = did not experience external labor mobility

[b]Reference category = experienced downward or lateral external labor mobility.

4.3 Robustness checks

Some decisions were made during the operationalization of the variables that could have influenced the results and therefore robustness checks were carried out. First, upward external labor mobility was measured differently in 2012 compared to 2010 and 2014. The waves of 2010 and 2014 had a direct question on whether someone's new function entailed a promotion compared to the previous function, whereas in 2012 this variable was constructed based on educational level. Therefore, it is analyzed whether the results change if respondents that participated in 2012 are omitted from the analyses. Second, ideally it should also be analyzed whether the results remain similar if the category *"I resigned"* in the dependent variable voluntary external mobility is changed from the category 'voluntary' to the category 'forced'. Resignation was previously considered to be voluntary, but it can also have a more forced character. Employers might want to fire an employee, but, to prevent face loss for the employee, cover this up as a resignation, which makes it useful to analyze whether results differ if voluntary external labor mobility is altered. However, this analysis is not carried out because in the available data the answer category *"I resigned"* accounts in 2010 for all voluntary mobility respondents, in 2012 for 172 out of 179 respondents and in 2014 for 228 out of 261 respondents. It can be concluded that the variable voluntary external labor mobility is for a large extent based on the "*I resigned"* category. Shifting this answer category to forced mobility would therefore leave very few respondents in the voluntary mobility category. As an alternative this topic is included in the discussion as limitation of the study.

With regard to the robustness check for omitting 2012 from the analyses, it can be concluded that the omission of the respondents did not substantially alter the effects of the independent variables on upward external labor mobility. In the Model with only personal factors as explanatory variables, the odds ratios for education (*OR*=1.38, p<.001*)* and age *(OR*=.97, p<.001) only slightly changed, but more importantly, the direction and significance remained the same. In the Model with only job factors as explanatory variables, the odds ratio for having a temporary contract (*OR*=.59, p=.001) did slightly increase, but again the significance and direction of the effect did not change. For the Model with all independent variables similar results were found to Table 11 as well, with for education *OR*=1.36, p<.001, for age *OR*=.96, p<.001, and for having a temporary contract *OR*=.42, p<.001. All other effects, including the moderators, had no significant effect on external labor mobility, which is also similar to the results found when the respondents participating in 2012 were included in the analyses.

5 Conclusion

In order to be able to make the labor market more dynamic for Dutch public servants, it was argued that the government needs to stimulate labor mobility (Blok, 2015). Hence, if people leave the organization, it is likely that a substitute employee must be found. The more external labor mobility, the more this must be done, which results in a more dynamic labor market. This thesis focused on understanding what makes public servants leave the government, since that would help in the development of adequate policy that addresses their low rates of labor mobility. Understanding external labor mobility in the public sector was done by investigating two research questions: *'What does the composition of the outflow of public servants from the Dutch Government look like and is this similar to the composition of current personnel?'* and *'To what extent do personal and job characteristics explain external labor mobility in the Dutch Government?'* Below, both research questions are answered and the implications of the results for using the opportunity constraint as theoretical framework are discussed.

5.1 Departing employees compared to sitting employees

Comparing departing employees to sitting employees, it can be concluded that they differ on varying aspects. First of all, departing Dutch public servants are in general younger and higher educated than sitting Dutch public servants. In other words, while the rates of external labor mobility are low in general, it is especially the older and lower educated employees that remain within the same organization. Furthermore, the proportion of women that left the government is higher than the proportion of men that left, indicating that men more often stay within their organization. Moreover, the proportion of employees with an ethnic minority background that left the government is higher than the proportion of those with a Dutch background. Based on personal factors, this more or less constructs typical general profiles of the sitting and departing public servant. It is especially the old, lower educated man with a Dutch background that does not switch jobs between organizations, whereas young, female, higher educated, non-Dutch employees more often do so.

For job factors, differences in sitting and departing personnel were found as well. First, it can be concluded that departing personnel more often has a temporary contract than sitting personnel. Second, it is the case that departing personnel has fewer working hours than the sitting personnel. Third, departing personnel has lower job satisfaction than sitting personnel.

5.2 Personal and job factors as determinants of external labor mobility

In this study, using data from Dutch public servants, the understanding of actual external labor mobility was broadened by analyzing whether personal and job factors explain 1) external labor mobility, 2) voluntary external labor mobility, and 3) upward external labor mobility. By not only analyzing whether people left the government, but also why they left and whether they made a

promotion, insight in external labor mobility in the Dutch government is gained. The mechanisms are based on an opportunity-constraint model, of which its appropriateness is reviewed below.

5.2.1 Education and age matter for labor mobility

First of all, external labor mobility in the Dutch government can be explained by the personal factor 'education'. Public servants with a higher education are more likely to experience external labor mobility than those with a lower education. Furthermore, this external labor mobility is more often voluntary and those with a higher education are also more likely than lower educated employees to experience promotions. These conclusions can be understood by the idea that higher educated public servants encounter more opportunities and fewer constraints in the labor market than lower educated public servants. Employees with a higher education are more attractive for employers because they signal a high degree of human capital (Becker, 1994), which increases their opportunities to land jobs at other organizations. This is backed up by the finding that the mobility of employees with a higher education is more often voluntary. Because of the relatively high human capital the Dutch government does not want these public servants to leave, which reduces their likelihood to experience forced labor mobility. If these public servants do leave, it is likely that they will exploit their attractiveness for other employers by voluntarily landing jobs at other organizations. Furthermore, opportunities at the labor market seem to be so rich that public servants with a high education also experience more promotion than those with a lower education. This is an interesting result since it can be argued that for lower educated people there is a wide array of 'better' jobs compared to their current job since they more often have jobs that are further away from top level jobs, whereas higher educated individuals usually are already closer to top level occupations (Sicherman & Galor, 1990). Despite this wider range of potential promotions for lower educated public servants, higher educated public servants still experience more upward external labor mobility, which could therefore be interpreted as strong evidence for more opportunities at the labor market for higher educated public servants.

Second, age is an important determinant for external labor mobility of public servants in the Dutch government as well. Older employees are less likely to experience external labor mobility than younger employees, and when older employees do experience external labor mobility this is less likely to be voluntary and less likely to be a promotion. These relations can be understood by the idea that older employees experience more constraints and fewer opportunities in the labor market. As public servants become older, they are more likely to shift their priorities towards family life (Noe, Steffy & Barber, 1988). Stressful and time intensive events such as job change are then avoided, which reduces their likelihood to experience external labor mobility. Moreover, they have fewer opportunities in the labor market because employers have a preference for younger employees (Moore, Miller & Fossum, 1974).

While it was concluded that if employees become older they would have fewer opportunities in the labor market and therefore less external labor mobility, this is especially the case if they are male. An explanation could be that women more often work part time (Higgins, Duxbury & Johnson, 2000; Booth & van Ours, 2013) and that the priority shift towards family life that comes together with increasing age therefore less often interrupts their working life. For men, it is possible that family life comes at the cost of an extensive working life. Because the shift of priorities towards family life imposes more time constraints for men, they will avoid stressful and time intensive events with respect to their working life, such as job change. This in turn reduces their likelihood of experiencing external labor mobility across the lifespan.

5.2.2 *Understanding the relations of having a temporary contract and job satisfaction with external labor mobility*

Public servants with a temporary contract are more likely to experience external labor mobility than public servants with a permanent contract. This could be explained by the fact that employees with a temporary contract desperately want to obtain a permanent contract (Engelland & Riphan, 2005), and that therefore they put extra effort into their work which makes them look more productive. This makes them more attractive for other employers, which increases their opportunities of finding jobs at different organizations.

However, it is necessary to conclude that the above mentioned is not necessarily entirely true. While support was found for the direct positive relation between having a temporary contract and external labor mobility, the opposite was found for the relation of having a temporary contract with voluntary external labor mobility. Public servants with a temporary contract are more likely to experience forced mobility rather than voluntary mobility, which could contradict the argument that public servants with a temporary contract have more opportunities in the labor market. It is possible that it is simply the case that public servants with a temporary contract are easier to let go for the Dutch government, because they do not have the security of employment that a permanent contract does entail. This makes it easier for employers to just not extend the contracts of these employees, resulting in high rates of (forced) external labor mobility. Moreover, it can be argued that the finding of an increased likelihood of forced mobility for Dutch public servants with a temporary contract actually reflects fewer opportunities in the labor market. It is likely that employees desperately want to obtain permanent contracts, but fail to do so at other organizations. Therefore they will remain at their current organization until their contract ends. When their contracts ends and they leave the Dutch government they are still classified as being externally mobile, but by then it has become forced mobility. If they would have a richness of opportunities in the labor market, it is more likely that they would have voluntarily obtained permanent contracts at other organizations. The finding of having more forced

mobility suggests that it is not the case that permanent contracts came to be available for these employees, which logically would indicate the absence of opportunities in the labor market.

The relation between job satisfaction and external labor mobility is not so clear either. At first sight, public servants with more job satisfaction are less likely to leave the Dutch government than those who have less job satisfaction. This could be explained by the idea that satisfied employees are less motivated to search for other functions, which constrains them in the labor market. However, it was also argued that given mobility, more satisfied employees would only be interested in job change if this opportunity would entail a better situation, hence a promotion. No support was found for this mechanism however and therefore it must be concluded that the relation between job satisfaction and external labor mobility in general can be understood through opportunities in the labor market, but that for upward external mobility this is not the case. An alternative explanation for the lack of a relation between job satisfaction and promotion could be a mechanism of organizational commitment. Welsch & LaVan (1981) showed that satisfied employees are more committed to the organization. If the organizational commitment of public servants is that high that even promotions are turned down, then this could explain the absent relation between job satisfaction and upward external labor mobility.

5.2.3 Understanding the relations of gender, ethnicity, and work hours with external labor mobility

With regard to gender, the results show that women actually experience more external labor mobility than men, whereas based on the opportunity constraint model it was argued that men would have more opportunities and less constraints in the labor market and therefore more external labor mobility. While it is not the case that gender does not matter for external labor mobility, the fact that this contradicts hypotheses makes it more difficult to understand the relationship. A possible explanation for this finding is the so-called token principle. This principle is based on the assumption that women can serve as 'token' in the workforce. It assumes that women are hired in order to show the social inclusiveness of the workforce (Baron & Kreps, 1999). However, if something (negative) happens this is ascribed to the female employee being a woman. For example, if a male employee has a burnout, it is more likely that this is ascribed to the intensity of the job, whereas if a woman has a burnout it is more likely that this is ascribed to that she might be emotionally unstable in the first place. This effect then results in women not feeling at ease in the workforce, which feeds their inclination to leave the organization. Another possible explanation can be that men experience more internal promotion than women (Blau & Devaro, 2007, Cobb-Clark, 2001). It could be that men are more likely to make a career within the organization, which reduces their inclination to leave the organization.

Moreover, no differences in the extent to which female and male employees experience upward external labor mobility were found. The fact that no support was discovered for that women experience fewer promotions than men can be interpreted as that this study does not support the idea of a glass ceiling as constraint for female employees in the labor market. While this is a somewhat

surprising result, it is not the first study that fails to identify a certain glass ceiling in the public sector. Powell & Buttefield (1994) for example failed to find evidence for a glass ceiling within the American federal government, thereby arguing that this could be due to the fact that the federal government is different from other organizations, which leaded to the absence of decision-making that favored men. Moreover, Nutley & Mudd (2005) argued that the glass ceiling in the public sector is not a thing of the past, but that the ceiling is becoming increasingly higher. In the public sector women seem to be more able to occupy higher positions within the organizations and it is merely the absolute top level that remains predominantly occupied by men.

With regard to ethnical background, it was found that having a non-Dutch ethnical background is not related to experiencing external labor mobility. However, this only shows a part of the story. By looking at what happens when they do experience external labor mobility, it becomes clear that it does matter with regard to the sort of mobility they experience. Employees with a non-Dutch ethnical background experience more forced labor mobility than those with a Dutch ethnical background. A possible explanation is that a lack of opportunities and abundance of constraints is not necessarily an issue for ethnic minorities, but rather the appreciation of employees regarding those employees that have a background with lower status, following the status characteristics theory. This theory implies that members of lower status groups should perform better to be valued equal to those that are not a member of lower status groups (Wagner & Berger, 1993). It could therefore be the current employer underestimate the performance of ethnic minorities and that this employer is therefore more inclined to let these specific employees go in case of reorganization, for example. Either way, no direct support was found for the notion that differences in ethnical background lead to differences in opportunities and constraints in the labor market for external labor mobility.

With respect to the amount of working hours, it was argued that employees with a higher number of working hours would encounter more opportunities and fewer constraints in the labor market. However, looking at the results it becomes clear that there is no relation between the number of working hours, external labor mobility and upward external labor mobility. However, a direct opposite effect of what was expected was found for experiencing voluntary labor mobility. Here, it was argued that having a high number of working hours reflects ambition and that this ambition would lead to more opportunities in the labor market and therefore results in more voluntary than forced labor mobility. A possible explanation for the finding that a higher number of working hours is related to higher rates of forced labor mobility could be the existence of time constraints. Employees that work many hours might just not have the time to also search for other jobs, hereby not facilitating options for voluntary external labor mobility.

6 Discussion

In this part of the thesis it is evaluated to what extent the study succeeded in developing an accurate understanding of how to address the problem of low rates of external labor mobility in the Dutch government. Evaluating the study is done by first assessing to what extent external mobility can be understood, second by evaluating the theoretical framework, and third by evaluating the methodology and results of the study. In every section the strong points, weak points, and implications for future research are presented.

6.1 Understanding the contemporary social problem

External labor mobility was investigated with a unique composition of research topics and potential influential factors. Not only analyzing whether people left the government, but also analyzing why and whether they made promotion led to a broad understanding of external labor mobility in the government. Such a design provides a more thorough insight in the suitability of used theories and mechanisms than had previously been done in this setting. That is, there is a profound difference in whether people leave the government voluntary or forced, or whether they experience a promotion or not. For example, if employees are more often forced to leave the government, then this cannot be seen as evidence for having more opportunities in the labor market, whereas if they would leave voluntarily it is more likely that they encounter more opportunities in the labor market. Also, settling with downward or lateral labor mobility indicates more constraints in the labor market, whereas a promotion indicates opportunities. Now that several instead of merely one of the three dependent variables are analyzed, mechanisms of labor mobility in the government can better be understood.

A weaker point of this study is that only personal and job characteristics are analyzed as factors for potentially having more or fewer opportunities and constraints in the labor market and therefore eventually more or less external labor mobility. However, this study neglects effects of organizational characteristics, whereas several scholars underlined its explanatory value (Michaels & Spector, 1982; Mowday, Porter & Steers, 2013). Moreover, in the introduction it was argued that the Dutch government is a rather special organization and it would therefore be interesting to see what kind of effects organizational factors would have on external labor mobility. Future research could focus on this by, for example, drawing large samples from sitting and departing employees of all ministries and implementing organizations, which enables researchers to carry out multilevel analysis. Such a multilevel analysis would give insight into potential differences in mobility between the governmental bodies, hereby analyzing organizational effects on labor mobility. By finding at least 50 respondents per ministry or implementing organization, the minimum requirements of multilevel analyses are matched (Maas & Hox, 2005). Also, with such a sample it is unlikely that the information can be traced back to the respondent, hereby guaranteeing the privacy of the participant. This is of importance

because in the current dataset some samples of particular ministries are rather small, which makes differentiating based on these ministries undesirable.

6.2 Theoretical review

So far, scholars only tested theoretical frameworks regarding labor mobility on the general labor market, not specified to the situation of the Dutch government. This thesis sheds light on the situation of the Dutch government by analyzing to what extent the framework of varying opportunities and constraints for individuals in the labor market determines movement in the public sector. While the use of such a framework can be interpreted as a strong point of this thesis, the fact that the theoretical framework does not allow all derived hypotheses to be confirmed is a weaker point. It seems that not every factor affects an individual's opportunities and constraints in the labor market. Below, suggestions for how future research should approach the unexpected outcomes are presented.

First, for ethnicity, all hypotheses based on the opportunity constraint framework were rejected. No relations were found for ethnicity with external labor mobility and upward external labor mobility. Other mechanisms than the opportunity constraints mechanism could be at play and in order to determine whether or not there is a relation between ethnicity and labor mobility within the Dutch government, future research should focus on acquiring a broader understanding of possible effects of ethnicity. A good starting point for understanding why ethnic minorities experience more forced external labor mobility could be the status characteristics theory. Status characteristics theory assumes that people from lower status groups should perform better in order to be valued as much as people of higher status groups (Wagner & Berger, 1993). In other words, employers can be negatively biased towards lower status groups to which ethnic minorities possibly belong. If the situation then occurs that dismissals are inevitable, it could be that those from a lower status group are let go whereas they are as productive as their higher status group equivalent. Future research could start to broaden the understanding of the relation between ethnic minorities and external labor mobility in the Dutch government by scrutinizing the applicability of this theory.

With respect to gender effects, further understanding of the relation between female and male employees with external labor mobility is required. It should be examined what lies at the basis for the finding that women actually experience more labor mobility than men. In the conclusion it was argued that this could perhaps be due to the token principle, which could be a proper starting point for future research.

Looking at work hours, again it is required to understand why there is a lack of effects on external and upward external labor mobility. Furthermore, it should be examined what could be the reason for finding a direct opposite effect of working hours on voluntary external labor mobility. In the conclusion it was argued that having more working hours could lead to more forced labor mobility,

because employees simply do not have time to orient themselves on new jobs. Furthermore, it could also be that public servants with many working hours do not want to leave the government, because they have a stable job and a permanent contract. A good starting point for future research would therefore be to examine whether one of those mechanisms could aid in understanding the relation between working hours and external labor mobility in the Dutch government.

6.3 Methodological review

All hypotheses were tested using PoMo data, resulting in a dataset which contains information on 11,977 public servants participating in 2010, 2012 and 2014. As previously argued, the analysis based on this dataset is a strong point of the thesis. The dataset includes extensive information on personal and job characteristics, labor mobility, and employability of employees within the government. While the richness of the dataset in itself can already be seen as strong point of the thesis, the combination of both sitting and departing personnel into one dataset is unprecedented and enabled the possibility to examine which factors determine outflow using PoMo data.

Furthermore, another strong point of the methods of the thesis is that combining varying PoMo waves facilitated the possibility to examine whether potential effects remain stable over time. Unfortunately however, and this is a somewhat weaker point of this thesis, the data is cross-sectional over the years. Samples are randomly drawn every year, making it possible that respondents participate twice, whereas it would be better to examine effects over time using longitudinal rather than cross-sectional data. Future research might delve into following respondents over time, hereby paving the way for longitudinal research on external labor mobility in the Dutch government.

Other limitations can be identified in the operationalization and measurements of the variables. First, those employees that were treated as having experienced voluntary external labor mobility are mostly respondents that reported that they resigned. However, these resignations do not always have to be voluntary. For example, the resignation could be framed as if it was a result of mutual agreement between employer and employee in order to prevent loss of face for the employee, whereas it is actually the case that the organization wanted to let the employee go. Therefore, future research should focus on developing a more diverse sample of voluntary external mobile public servants. Second, the independent variable ‘work hours’ was actually measured by the amount of contract hours of the respondent. It is unlikely that the amount of contract hours is a perfect proxy for the amount of work hours, since people simply do not necessarily work as long as is specified in their contract. Moreover, potential overtime is neglected, which could actually be a valid indicator of ambition. Third, the variable job satisfaction was only measured for respondents participating in 2014. Therefore, no statements can be made on whether the effects of this variable are stable over time.

7 Policy Advice

Based on this research, several suggestions for policy can be made. Below the policy question *'What can be adequate measures for influencing external mobility so that a more dynamic organization can be realized for the Dutch government?'* is answered by providing propositions for future policy based on the found relations in this study. This means that policy is only based on the relations of age, education, temporary contracts and job satisfaction with external labor mobility, because for gender, ethnicity, and work hours evidence-based policy can only be developed if the relation is understood.

Before moving on to the concrete measures for the stimulation of external labor mobility, it is important to stress that the goal is not to increase external labor mobility, but increase the dynamics for the health of the organization. In that sense external labor mobility in itself is not the goal, but rather a measure for discouraging decline in the employability of public servants. In short, the goal is not to fire people in order to be able to present high mobility rates, but to make the government an energetic organization where employees more often come and go. Therefore, policy cannot simply encourage external labor mobility, but has to consider and address the potential negative effects of stimulating external labor mobility. An obvious negative side effect is that if external labor mobility is stimulated, there is a danger for the government that its best employees become more likely to leave. These public servants are most attractive for other employers and therefore they will have plenty of opportunities in the labor market. Throughout the policy advice this issue is held into account.

7.1 Towards a more attractive government for young employees

Negative relations were found for age with external labor mobility, voluntary external labor mobility and upward external labor mobility. Older public servants therefore experience less external labor mobility and if they do experience mobility, this is more often forced mobility and lateral/downward mobility. Based on these findings, below measures are presented that address this issue. It is argued that mobility within the government can be stimulated by making the government more accessible and attractive for young employees.

The idea behind making the government attractive for young employees is simple. The Dutch government clearly has way less young employees than older employees (Toshkov, 2017), whereas young people are more mobile. Thus, if young employees are more inclined to join the organization, the degree of labor mobility within the government increases. However, these employees are only attracted if the organization recognizes what young employees nowadays value in organizations. The young employees of today can be classified into the 'millennial generation', which started to enter the workforce somewhere around 2004 (Hershatter & Epstein, 2010). Basically, if the wishes of this millennial generation are met, an organization becomes attractive for the young professionals of today.

These sections provide insight into the wishes of these young professionals, after which concrete measures are presented for improving the attractiveness of the Dutch government as employer.

Deal, Altman and Rogelberg (2010; p.191) stated that the *"empirical research published on Millennials is confusing at best and contradictory at worst".* Although this might be the case, they also stated that scholars do agree about some topics regarding the behavior and values of Millennials. Ng, Schweitzer and Lyons (2010) found that for Millennials 'rapid advancement' and 'the development of new skills' are crucial requirements in their choice for an organization. This implies that they find it especially important to be able to continuously improve their own performance. Therefore, it is of crucial importance that the Dutch government provides such opportunities for younger employees.

A clear example of where it is already the case that the government as employer facilitates the development of young employees is the example of the traineeships. A traineeship is a job for starting employees that includes extensive education, which obviously fits well with the preferences of the Millennials. However, the downside of this program is that it is rather selective and therefore only accounts for a small part of the inflow of new employees, making the program incapable of changing the demography of the workforce in the Dutch government. While new traineeships are being developed – for example a data traineeship, which also fits very well with the focus of Millennials on technology (Deal, Altman, & Rogelberg, 2010) – these remain selective and therefore do not alter the demographics of the workforce. Thus, I argue that it is necessary to develop some sort of alternative, less selective program. The program should coexist with the current selective traineeships, but then not only the best young employees are selected, but rather the 'suitable' ones. This alternative program then serves as a tool for the recruitment of young talent. Having more youth in the workforce attracts other youth, which leads to shifts in the demographics of the workforce, which in turn leads to higher rates of labor mobility and a more healthy organization.

The realization of these alternative traineeships could start with exploratory work carried out by the coordinators of the existing traineeships. Because of their experience with the traineeships, they know what it takes to make these programs into a success. Input of current trainees and of those who recently finished the program can be used, because they have hands on experience with the traineeships and therefore are likely to know what young people value in these programs. Together they could make a draft proposal according to their insights of how the alternative programs should be shaped. After doing so, this proposal can be passed on to decision makers. If eventually it is decided that the project gets a green light, it is important to include the coordinators of the current traineeships in the search for coordinators of the alternative traineeships. Again, they have the experience to know what a proper traineeship coordinator requires and are therefore best suited to recruit the new coordinators.

7.2 Employee training

Since higher educated employees are already quite mobile, policy should focus on increasing the employability of the lower educated employees. Previously, it was shown that human capital is important for opportunities in the labor market and that education is an important form of human capital. However, Becker (1994) states that not only education, but also training is one of the most vital features of human capital. Since lower educated people have lower human capital than the higher educated employees, they could possibly compensate this by undergoing training. While employers are usually inclined to train their higher educated employees, training lower educated employees would increase their chances in the labor market, which is beneficial for the labor mobility rates of the Dutch government.

However, the employer does not want the trained employees to immediately leave after they underwent the training, because then the training would miss its initial goal: increasing the productivity of the organization. This can be solved by adding a clause in the contract stating that after the training the employees are obliged to remain at the organization for a certain period. In this way, the government still benefits from the increased productivity of the employee and afterwards the employee has increased opportunities in the labor market and therefore is more likely to undergo labor mobility within the government increases as well.

7.3 Flexicurity

If stimulating external labor mobility were the goal of this study, it would be sensible advice to give employees only temporary contracts. However, as previously stated, stimulating labor mobility is only a measure to come to a more dynamic and healthy organization. Giving employees merely temporary contracts would certainly not add to the health of the organization, which is why in this section the emphasis lays on the concept of flexicurity. Flexicurity is considered to be an option for the stimulation of labor mobility with temporary contracts and guaranteeing security for the employees, which preserves the health of the organization. Below, first the concept of flexicurity is further defined, after which its history in the policy of the Dutch government and its future in the policy of the Dutch government is discussed.

7.3.1 The concept of flexicurity

Wilthagen, Tros and van Lieshout (2003; p. 3) define flexicurity as *"a policy-strategy that attempts (…) to enhance the flexibility of labor markets, the work organization and labor relations on the one hand, and to enhance the security – employment security and social security – (…) in the labor market on the other hand"*. An advantage of flexicurity is that it is both beneficial for the performance of the organization (Andersen & Svarer, 2007; Viebrock & Clasen, 2009; Wilthagen & Tros, 2004) as for the employability and work satisfaction of the employee (Origo & Pagani, 2009). In short, flexicurity is a

strategy for making the labor market more flexible and therefore increasing external labor mobility, while guaranteeing security for the employees.

7.3.2 The history of flexicurity in the Dutch government

The concept of flexicurity is not entirely new to the Dutch labor market in general and the Dutch government in specific. The Netherlands has a rich history of implementing policy based on the concept of balancing flexibility and security (Oorschot, 2004; Wilthagen, Tros & van Lieshout, 2003). During the 1980s the Dutch labor market was primarily focused on flexibility, whereas later more attention was paid to the concept of security. In 1999, the so-called 'flexibility & security' act was adapted, which introduced a set of measures that made the labor market more flexible and secure. Then, in 2001 the 'National Plan of Action on Employment' shifted the attention from flexibility to employability and the participation of employees (Wilthagen, Tros & van Lieshout, 2003). Despite this policy that is clearly implemented in order to make the Dutch labor market more flexible and secure, Oorschot (2004) concluded that the Dutch labor market in general was lagging behind on the other labor markets in Europe.

More recently, the Dutch government introduced the so-called 'Work and Security Act' (Rijksoverheid, 2015). This act imposed several important changes for the Dutch labor market in terms of flexibility and security for employees. Previously, employees with a temporary contract would be able to obtain a permanent contract after three years. However, with the implementation of the Work and Security Act employees with a temporary contract should be able to receive a permanent contract after their two years. Also, with regard to security, some form of wage security is introduced. With the implementation of the act, employees now have a right of so-called transition compensation. With a maximum of 75 thousand euros, employees now have an income when they are in between jobs.

While this act at first sight looks rather positive for employees, it is subject to strong criticism. It was argued that many organizations cannot afford permanent contracts, which leads to the situation that employees with temporary contracts now work for even shorter periods for employees or do not even get work at all (CPB, 2016). Although they have the security of an income, they also want to do paid employment. Altogether, therefore it is argued that the Dutch government should rather focus on employment security instead of wage security.

7.3.3 *The future of flexicurity in the Dutch government*

While wage security in itself fits the idea of flexicurity, it is not sufficient to the issues of employees with a temporary contract. By implementing not only wage security but also employment security, it is likely that employees will be more inclined to accept temporary contracts. The idea is that temporary contracts are very beneficial for external labor mobility rates, but that employees do not want temporary contracts because they lack the security a permanent contract does come with. By

guaranteeing employment to employees, these issues can be overcome. If employees with a temporary contract are assured that if their contract ends there will be paid work for them, then it is likely that employees will be less reluctant to accept temporary contracts. Below, it is explained how this focus on temporary contracts and employment security can be implemented.

Employment security could be guaranteed for employees if the Dutch government builds partnerships with other organizations. Ideally, a carrousel of employees with temporary contracts between organizations is created which greatly benefits the employability of the employees on the one hand and the dynamics of the organizations on the other hand. Partnerships can be entered by parties that have overlap in their day-to-day work. A clear example could be a partnership between the Ministry of Infrastructure and Environment and the Dutch Railways. Consider this example to be an extensive relationship where employees go back and forth between the organizations. It is relatively easy to switch organization for these employees, because it can be argued that the organizations have many similarities in their day to day work. The switching is beneficial for the organizations because employees use the knowledge they gained in their previous job for tasks they have to carry out in their new job. This way, the productivity of the organization becomes higher. Also, the employability of the employee increases because they gain experience at different working environments, thereby developing a broader array of skills.

7.4 Job satisfaction

In this study it was found that employees with more job satisfaction are less likely to experience external labor mobility. Obviously, reducing job satisfaction to stimulate external labor mobility would undermine the health of the organization, which makes it an undesirable measure for the Dutch government. An alternative approach for the measures based on this relation is to show public servants that by switching organizations, job satisfaction is not automatically lost as well. By facilitating the opportunity for employees to have a look in other organizations, public servants become more aware of the advantages of working in other companies. More concrete, the Dutch government could facilitate internships to show the public servants that working at other organizations can also be satisfying. Of course, it should not be the case that the government merely sends interns to other organizations, resulting only in an outflow of public servants. The Dutch government should rather partner up with other organizations so that other employees become interns in the Dutch government as well. If the willingness of other organizations is high, varying partnerships could be established, which would make the Dutch government way more dynamic.

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Appendix A – Correlation Matrices

Table 14. Correlation matrix of variables with sitting and departing respondents in 2010, 2012, and 2014 (N=11,977).

	Ext Labor Mobility	Education	Age	Female	Et. Dutch	Et. West	Et NonWest	Temp Contract	Work Hours	2010	2012	2014
Ext. Labor Mobility	1											
Education	.11***	1										
Age	-.18***	-.21***	1									
Female	.09***	.04***	-.24***	1								
Et. Dutch	-.02*	.01	.06***	-.07***	1							
Et. West	.00	.01	.01	.04***	-.76***	1						
Et. NonWest	.03**	-.03**	-.11***	.06***	-.59***	-.09***	1					
Temp Contract	.37***	.08***	-.23***	.07***	-.06***	.02*	.06***	1				
Work Hours	-.04***	.05***	.01	-.40***	-.03**	.02	.02*	-.04***	1			
2010	.07***	.00	-.09***	.03**	.00	.02*	-.02*	.04***	-.00	1		
2012	-.08***	.00	-.00	-.01	.01	.00	.02	-.04***	-.01	-.49***	1	
2014	-.00	.00	.09***	-.02	.01	-.02	.01	-.01	.02	-.54***	-.46***	1

*P<.05, **P<.01, ***P<.001.

Table 15. Correlation matrix of variables with departing respondents in 2010, 2012, and 2014 (N=1,555).

	Vol. Ext Labor Mobility	Upw Ext Labor Mobility	Education	Age	Female	Et. Dutch	Et. West	Et NonWest	Temp Contract	Work Hours	2010	2012	2014
Vol. Ext. Labor Mobility	1												
Upw. Ext. Labor Mobility	.30***	1											
Education	.25***	.14***	1										
Age	-.16***	-.16***	-.24***	1									
Female	.05	.03	.03	-.15***	1								
Et. Dutch	.09**	.02	.01	.06*	-.06*	1							
Et. West	-.05*	.00	.02	.03	.00	-.72***	1						
Et. NonWest	-.07**	-.03	-.04	-.11***	.08**	-.62***	-.10***	1					
Temp Contract	-.39***	-.10***	.05	-.29***	.06*	-.13***	.08**	.10***	1				
Work Hours	-.02	.04	.07**	-.06*	-.34***	-.03	.03	.01	-.04	1			
2010	.17***	.01	.01	-.10***	.02	.00	.02	-.02	-.04	.01	1		
2012	-.08**	-.03	-.03	.01	-.01	-.02	-.01	.04	.01	-.03	-.49***	1	
2014	-.12***	.01	.01	.10***	-.02	.02	-.01	-.02	.04	.02	-.64***	-.36***	1

*P<.05, **P<.01, ***P<.001.

Table 16. Correlation matrix of variables with sitting and departing respondents in 2014 (N=3,727).

	Ext Labor Mobility	Education	Age	Female	Et. Dutch	Et. West	Et NonWest	Temp Contract	Work Hours	Job Satisfaction
Ext. Labor Mobility	1									
Education	.14***	1								
Age	-.16***	-.21***	1							
Female	.06***	.04*	-.25***	1						
Et. Dutch	.01	.03	.06***	-.06***	1					
Et. West	.01	.01	-.01	.05**	-.75***	1				
Et. NonWest	-.02	-.06**	-.08***	.03	-.60***	-.08***	1			
Temp Contract	.20***	.08***	-.19***	.04**	-.02	.01	.01	1		
Work Hours	-.05**	.06***	.01	-.39***	-.04*	.02	.03*	-.03	1	
Job Satisfaction	-.05**	.02	.04**	.01	-.02	.02	.01	-.02	.01	1

*P<.05, **P<.01, ***P<.001.