Between Welfare and Farewell

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Chapter 5

Welfare and Migration Aspirations

In this study we investigated the impact of welfare state characteristics on migration aspirations using experimental data from a factorial survey among 300 Dutch master students. We addressed how and to what extent welfare state characteristics of hypothetical destination countries affect individuals' migration aspirations, and whether this impact varies with economic circumstances and personality traits. Higher costs of healthcare in the destination country and longer waiting times appeared to lower migration aspirations. Higher levels of unemployment benefits on the other hand had the potential to raise migration aspirations, particularly in combination with better job prospects. Finally, higher unemployment benefits increased migration aspirations of individuals with higher levels of risk aversion and self-efficacy. These findings indicate that welfare arrangements affect migration aspirations by reducing risks and offering a strategy to cope with unforeseen events.

5.1 Introduction

Welfare states can offer direct and indirect forms of income, affect quality of life, widen the range of choices and provide insurance in the case of risks (Kurekova, 2013). It is through these mechanisms that the welfare state can be argued to have an impact on migration decision-making. Previous research on the subject mainly expected an attracting effect of the welfare state on migration. Several studies therefore tested whether a link exists between the number of immigrants moving towards a country and the amount of money the government of that country spends on welfare provisions (e.g., Geis et al., 2013; Jackson et al., 2013; Josifidis et al., 2014; Kurekova, 2013; Palmer & Pytlikova, 2015; Razin & Wahba, 2015). However, such approach leaves the underlying mechanisms, the different elements of the welfare state, as well as individual variation in the importance of welfare state arrangements largely uncovered.

In this study, we take an innovative approach to advance the existing knowledge on the role of the welfare state in migration decision-making processes using experimental data from a factorial survey. We address how and to what extent different dimensions of the welfare state affect migration aspirations. Furthermore, we acknowledge that welfare state arrangements may not be equally important for shaping migration aspirations under all circumstances, or among all individuals. Besides direct influences of welfare state characteristics, we therefore investigated interactions with economic circumstances and personality traits. This way, the study sheds light on whether characteristics of the welfare state have an attracting, discouraging or facilitating impact on migration aspirations.

A factorial survey combines an experimental design with survey elements at the individual level. Our study population included over 300 Dutch Master students in the Netherlands. Respondents were asked to indicate for several descriptions of hypothetical destination countries (i.e., vignettes) to what extent they would be willing to migrate there after graduation. Vignettes were randomly varied on a restricted number of dimensions in an experimental manner. The period leading up to graduation represents a transitional phase in which

individuals are likely to make plans for the future (Gordon, Slade, & Schmitt, 1986; Remhof, Gunkel, & Schlaegel, 2014). Master students are therefore considered an applicable sample for this study. As not all aspects of the welfare state may be equally relevant to our target group, we focused on the characteristics of two types of welfare state arrangements: healthcare and unemployment benefits. As respondents indicated their migration aspirations for both short-term and long-term moves, we could explore the impact of the temporality of migration in our research.

Our design has a number of advantages that complement existing knowledge in at least four ways. First, crude measures of welfare generosity like social expenditure by the government are often highly correlated with other characteristics of a country, such as general prosperity (Caminada, Goudswaard, & Van Vliet, 2010). This makes it hard for studies using these indicators to isolate the effect of welfare state arrangements on migration decision-making. The experimental setup of a factorial survey on the other hand allows to disentangle the effects of factors that are often confounded in reality. At the same time, respondents still evaluate a number of dimensions simultaneously, which resembles real-world decision-making processes and forces them to make trade-offs (Jasso, 2006). Second, rather than assuming full knowledge of potential migrants on welfare state arrangements in the destination country, in a factorial survey, researchers have full control over the proposed scenarios as well as the information respondents have at their disposal. Third, most migration studies focus on those who actually migrated (Abraham et al., 2010; van Dalen & Henkens, 2012), leaving it unclear to what extent the welfare state influences considerations on whether or not to migrate. In this study we instead focused on migration aspirations, describing a person's conviction that leaving would be better than staying (Carling & Collins, 2018). This, in combination with the random allocation of vignettes ensured that our results are independent from respondents' migration incentives. Finally, previous studies have found personality traits like risk intolerance and self-efficacy to play an important role in shaping individual migration intentions (e.g., Remhof, Gunkel, & Schlaegel, 2014), but they can equally be expected to influence the role of the welfare state in shaping migration

aspirations (Heitmueller, 2005). However, in the absence of suitable data, previous studies have not empirically tested the hypothesis that risk-averse individuals are more willing to move towards countries with a stronger welfare state (Clark & Lisowski, 2017). By including well-established scales on self-efficacy and risk aversion we are among the first to study this in an experimental setting.

5.2 Theoretical framework

5.2.1 Welfare and the aspiration to migrate

Economic theories of international migration typically start from the assumption that migration decisions are based on a comparison of the economic and social conditions across different locations (OConnell, 1997). In addition, individuals are expected to behave rationally, and to maximize their returns (Stark, 1990). According to this line of reasoning, an individual will migrate when the potential lifetime economic gains of migration exceed the costs. Previous studies on the relation between the welfare state and migration often derived their hypotheses from this economic framework. Welfare state arrangements are treated in these studies as an alternative form of income affecting the expected returns to migration. Just like higher wages, generous welfare systems are therefore expected to attract migrants (e.g., Borjas, 1999). However, generous welfare states may also impact migration decisions in other ways. First of all, a more extensive welfare state could make a country *less* attractive to migrants when associated with higher costs, for instance through taxes (Geis et al., 2013). Furthermore, migrants may be less interested in generous welfare state arrangements abroad if long waiting times for welfare access apply. Such alternative mechanisms so far have not received much attention in the literature, although they may provide an explanation for mixed or non-significant effects found in previous studies investigating the impact of the welfare state on macro-level migration flows (Giulietti et al., 2013; Pedersen et al., 2008). Thus, different expectations can be formulated regarding the impact of welfare on the aspiration to migrate. On the one hand, welfare state arrangements may increase the aspiration to migrate through a direct beneficial impact on a person's (economic) situation. On the other

hand, welfare state arrangements may decrease the aspiration to migrate when associated with higher costs, or when they cannot be accessed directly by migrants. In line with these different arguments, the following expectations regarding two types of welfare state arrangements that were deemed most applicable to our sample – unemployment benefits and healthcare – are therefore tested in this study:

H1: Aspirations to migrate will be higher when the level of unemployment benefits is higher in the destination country than in the origin country.

H2: Aspirations to migrate will be lower when (longer) waiting times for immigrants to access unemployment benefits in the destination country apply.

H3: Aspirations to migrate will be lower when the personal costs of healthcare are higher in the destination country than in the origin country.

As healthcare is usually available to migrants directly upon arrival, a hypothesis on waiting times was formulated for unemployment benefits only.

5.2.2   Welfare as a way to reduce uncertainty

Besides a direct impact, one could also expect the welfare state to affect migration aspirations indirectly by reducing uncertainty. Prospect theory (Kahneman & Tversky, 1979) argues that a person's view of the world is limited by the information that is available at a given moment, and that decisions therefore may not be consistent or logical. Furthermore, the theory explains how people think in terms of gains and losses to their status quo rather than in terms of absolute wealth. That is, people are generally more willing to accept higher risks to avoid losses than to secure an equivalent gain (Czaika, 2015). Consequently, their choices are often not based on the economic, but on the psychological values of outcomes (Clark & Lisowski, 2017). Such reasoning appears particularly applicable to migration decisions, as long-term consequences of migration on an individual's situation are hard to predict. The notion of loss aversion helps to understand why many people do not migrate, despite promising prospects and opportunities abroad (Czaika, 2015). At the same time, this theoretical framework points towards a potential role of the welfare state in enabling migration, as protecting residents against life uncertainties is one of the main functions of the

welfare state. Welfare systems mediate how individuals fare in domestic labour markets, and can help workers adjust to situations of risk or transition (Kurekova, 2013). In the presence of a generous welfare state abroad, potential migrants may therefore feel better protected against risks associated with migration. Such mechanism may be important in general, but can be expected to be stronger under circumstances of higher perceived risks, or for persons who are less comfortable entering unfamiliar situations.

Economic uncertainty

First, welfare state arrangements like unemployment benefits possibly become more important when the economic gains from migration are lower, or less certain. Welfare state arrangements in these scenarios could act like a buffer, counteracting the negative impact of higher chances of income loss. Higher costs of welfare on the other hand may particularly discourage migration in the absence of high returns from the labour market. We thus expected to find an interaction effect between indicators of the economic situation – job chances and wage – and the welfare state arrangements under study:

H4a: Welfare state arrangements (unemployment benefits and healthcare) are less important for migration aspirations when job chances abroad are higher.

H4b: Welfare state arrangements (unemployment benefits and healthcare) are less important for migration aspirations when wages abroad are higher.

Personality traits

Second, it can be expected that the strength of the impact of welfare state arrangements on migration aspirations differs depending on personality. In the behavioural sciences it is emphasized that migration decision-making is influenced by individuals' psychological profiles (Williams & Baláž, 2012). Moving to a different country can give rise to strong feelings of uncertainty, as one has to adapt to a relatively unfamiliar environment (Remhof et al., 2014; Tharenou, 2008). Psychological traits that are associated with the likelihood that people enter novel situations, as well as their affective reactions to it, can therefore predict

individuals' aspirations to migrate (Boneva & Frieze, 2001). A few recent studies found risk-averse people to be less likely to migrate (Gibson & McKenzie, 2011; Jaeger et al., 2010; Van Dalen & Henkens, 2013). Self-efficacy, or the belief that one can effectively cope with a given situation, on the other hand was found to relate positively to migration aspirations (Hoppe & Fujishiro, 2015; Van Dalen & Henkens, 2013). Heitmueller (2005) argued that unemployment benefits will particularly impact migration decisions for risk-averse individuals, as they reduce the risk of migration and can act as an insurance devise. The study by Hoppe and Fujishiro (2015) further showed that persons with low generalized self-efficacy still managed to take concrete actions for migration when anticipated job benefits abroad were high. Comparable effects could be expected for self-efficacy and welfare benefits: favourable aspects of the welfare state (i.e., higher benefit levels) may result in aspirations to migrate also among those with low self-efficacy, whereas unfavourable aspects (i.e., higher costs, longer waiting times) may enforce the expected lower migration aspirations among those with low self-efficacy. From this line of reasoning, we therefore expected to find an interaction effect between personality traits – risk-aversion and self-efficacy – and the welfare state arrangements under study:

H5a: Welfare state arrangements (unemployment benefits and healthcare) are more important for migration aspirations among more risk-averse persons.

H5b: Welfare state arrangements (unemployment benefits and healthcare) are less important for migration aspirations among persons with higher generalized self-efficacy.

5.2.3   Other relevant mechanisms

In previous literature, little attention is paid to the temporality of migration, and the moderating effect it may have on the way migration decisions are shaped (Remhof et al., 2014). In this study, we therefore explored whether aspirations differed depending on short-term moves of maximum one year, and long-term moves of more than three years. For a number of reasons, the importance of welfare state arrangements for migration aspirations can be expected to vary with the anticipated length of stay abroad. First, anticipated benefits of a generous

welfare state, or contrarily the level of costs, are directly related to the time that is spent abroad. The positive effect of H1 and the negative effect of H2 may therefore be stronger when the length of stay increases. Second, long-term plans are likely associated with more uncertainty compared to short-term plans. Individuals may therefore be more likely to take the need for welfare state arrangements like unemployment benefits and healthcare into account when they expect a longer stay abroad. Finally, combined with a long-term stay, longer waiting times to access welfare increase the time that individuals live in a country where they are not protected by the welfare state. Combined with a short stay, on the other hand, longer waiting times could mean that welfare state arrangements are not accessible at all, which could equally have an impact on how they are evaluated by the individual.

We controlled all the analyses for economic and welfare state-related characteristics of hypothetical destination countries as compared to the situation in the origin country. Furthermore, previous migration research has mentioned many additional factors as shaping migration aspirations. The vignette design allows only for the inclusion of a limited number of dimensions while other aspects (e.g., distance, common borders, social networks) were deemed unsuitable to include in the hypothetical scenarios for the purpose of this study, as respondents could associate them with specific countries. This would subsequently impact the results in uncontrollable ways. The more neutral dimension effort to learn the language was therefore chosen as an additional control variable in the vignettes. This variable is not directly related to economic returns, yet influences the ease of settlement (Adserà & Pytliková, 2015). Finally, we included control variables capturing the respondent's relationship status, gender and age.

5.3 Data and Methods

5.3.1 Factorial survey design

A factorial survey design (for an overview, see Wallander, 2009) has recently been introduced to residential mobility studies (Abraham, Auspurg, & Hinz, 2010; Abraham & Nisic, 2012; Baláž, Williams, & Fifeková, 2016; Petzold, 2017). In our

study we adopted this design to unravel whether welfare state arrangements have an attracting, discouraging or facilitating influence on individuals' aspirations to migrate. Respondents were asked to form judgements about a number of vignettes – descriptions of hypothetical situations – with various dimensions. The levels of the dimensions were experimentally varied across the vignettes so that the impact of these levels on respondents' judgements could be estimated. To avoid providing either too much or too little information, a recommended number of six dimensions was included (Auspurg & Hinz, 2015). Figure 5-1 gives an example of the vignettes and shows the answer scales employed in this article. Table 5-1 shows the values of the dimensions wage, job chances, level of unemployment benefits, access to unemployment benefits, costs of healthcare and effort to learn the language that were systematically varied across the vignettes.

The Cartesian product of the dimensions and levels resulted in a vignette universe of 3^6=729 combinations. Because of this high number, not all possible vignettes could be presented to our respondents. A D-efficient sample of 54 vignettes (D-efficiency = 93.97) was therefore drawn from the full experimental design using the modified Federov search algorithm, which helps to find the optimal solution between perfect orthogonality and balance (see Kuhfeld, Tobias, & Garratt, 1994). The vignettes were distributed to nine decks containing six vignettes each, in order to avoid fatigue effects (Auspurg & Hinz, 2015; Sauer, Auspurg, Hinz, & Liebig, 2011). That is, there were nine questionnaire versions, and each participant rated six hypothetical destination country profiles.

Imagine a country where the average wage after tax in jobs of your disciplinary scope is **higher** to the Netherlands.
Your chances to find an adequate job here are **lower** than in the Netherlands.
Unemployment benefits are **lower** than in the Netherlands.
Unemployment benefits are accessible **6 months** after migration.
Personal costs of using healthcare of similar quality are **higher** than in the Netherlands.
For someone who speaks Dutch, it requires **moderate** effort to learn the language of this country.

To what extent would you be willing to move to this country for a maximum of one year?

| Not | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Very |
| at all | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | Much |

To what extent would you be willing to move to this country for more than three years?

| Not | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Very |
| at all | □ | □ | □ | □ | □ | □ | □ | □ | □ | □ | Much |

Figure 5-1 Example of a vignette

Table 5-1 Vignette dimensions and levels

	Dimensions	Level 1	Level 2	Level 3
1	Average wage	Higher than [country of origin]	Comparable to [country of origin]	Lower than [country of origin]
2	Chance of employment	Higher than [country of origin]	Comparable to [country of origin]	Lower than [country of origin]
3	Level of unemployment benefits	Higher than [country of origin]	Comparable to [country of origin]	Lower than [country of origin]
4	Access to unemployment benefits	Immediately upon arrival	After 6 months	After 2 years
5	Costs of healthcare	Higher than [country of origin]	Comparable to [country of origin]	Lower than [country of origin]
6	Effort to learn language	Low	Moderate	High

5.3.2   Dependent variables

For each of the described countries, respondents were asked: (a) To what extent would you be willing to move to this country for a maximum of one year? (b) To what extent would you be willing to move to this country for more than three years?. The answer scale ranged from 1 = *not at all* to 10 = *very much*. These scales are in line with previous factorial surveys investigating individuals' attitudes towards residential mobility (e.g., Abraham et al., 2010; Petzold, 2017), and were treated as continuous variables. Although in the literature different terminology has been used to refer to attitudes towards migration, in this study we refer to the dependent variables as capturing individuals' migration aspirations. According to the theoretical overview by Carling and Schewel (2018) this concept fits our questioning best, as it measures a person's conviction that leaving would be better than staying. Further in line with recommendations of Carling (2013), the questioning contains a clear time dimension.

5.3.3   Independent variables and controls

Besides evaluating the vignettes, in the survey part of the questionnaire respondents were asked to provide additional information about themselves. For the purpose of this study, we included validated scales on general self-efficacy (Schwarzer & Jerusalem, 1995) and intolerance of uncertainty (Carleton, Norton, & Asmundson, 2007) as measures of respondents' generalized self-efficacy and risk-aversion. In addition, questions on socio-demographic characteristics were included in order to control for the impact of sex, age, and partnership status (single, short-term relation, long-term relation or cohabiting). The vignette order and questionnaire version were included in our analyses as control variables as well.

5.3.4   Sample

Data used for this study were collected within diverse master programs – mainly within the social sciences – at Dutch universities between November 2017 and

March 2018.[21] All data were obtained by means of a paper-and-pencil interview (PAPI). The sample consisted of 467 respondents, together evaluating a total of 2,802 vignettes. As the comparison of a hypothetical destination country to the Netherlands in the vignettes likely has a different meaning for foreign-born students, for the purpose of this study we only included individuals born in the Netherlands, a sample of 319 respondents. Furthermore, although having children possibly has an impact on one's aspiration to migrate, within our sample the share of respondents who indicated to have children was too small to analyse and were thus excluded from our sample (n=3). We further excluded respondents with missing values on more than one of the items of the intolerance of uncertainty and self-efficacy scales (n=5), as well as those who did not indicate their sex (n=2), resulting in a sample of 309 respondents. After removing vignettes without an evaluation (n=2) we obtained our final sample of 1,852 vignettes.

5.3.5   Analytical strategy

Because each person evaluated six different vignettes, the models had to be corrected for correlated observations, as is the case with any repeated measures in within-subject designs (Hox, Kreft, & Hermkens, 1991). To analyse the data we therefore applied random intercept models (Bryk & Raudenbush, 1992; Snijders & Bosker, 2012) that account for dependent observations by estimating one joint random intercept for all observations from one single respondent. Characteristics of the vignettes varied on Level 1, and individual characteristics were modelled as Level 2 variables. Table 5-2 presents descriptive statistics of the sample. Because the vignettes' characteristics were all a direct result of our experimental set up, they always occurred with about the same frequency. Respondents were between 21 and 34 years old, with the majority being around 24 years old. In line with the gender distribution within the social sciences, males were underrepresented in our sample: 35% versus 65% of females. The majority of our respondents had a partner: 58%, of which 28% were together with their partner for more than a year

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[21] Erasmus University Rotterdam, Maastricht University, Radboud University, Technical University Delft, Tilburg University, University of Amsterdam, University of Groningen, Utrecht University, Vrije Universiteit Amsterdam (VU).

but not living together, and 17% lived together with their partner. Individual measures of general self-efficacy and risk-aversion were derived by adding respondents' scores on the items for each scale and dividing this sum score by the number of items. Values of both measures were normally distributed. Individuals in our sample on average scored moderate on risk-aversion (2.38 on a scale from one to five, with higher scores representing higher risk-aversion) and relatively high on generalized self-efficacy (3.12 on a scale from one to four, with higher scores representing higher generalized self-efficacy). Random allocation of the experimental stimuli ensured the independence of the vignettes' and respondents' characteristics.

Table 5-2 Sample description

	N	Range	Mean	SD	Median
Dependent variables					
<u>Aspiration to migrate</u>					
Maximum one year	1852	1 – 10	5.30	2.40	6
More than three years	1852	1 – 10	4.07	2.34	4
Vignettes' characteristics					
<u>Wage level (ref.: Comparable)</u>					
Higher	1852	0,1	0.34	0.47	
Lower	1852	0,1	0.33	0.47	
<u>Job chances (ref.: Comparable)</u>					
Higher	1852	0,1	0.33	0.47	
Lower	1852	0,1	0.33	0.47	
<u>Level of unemployment benefits (ref.: Comparable)</u>					
Higher	1852	0,1	0.33	0.47	
Lower	1852	0,1	0.33	0.47	
<u>Access to unemployment benefit (ref.: 6 months)</u>					
Directly	1852	0,1	0.33	0.47	
2 years	1852	0,1	0.33	0.47	
<u>Costs of healthcare (ref.: Comparable)</u>					
Higher	1852	0,1	0.33	0.47	
Lower	1852	0,1	0.33	0.47	
<u>Effort to learn the language (ref.: Moderate)</u>					
High	1852	0,1	0.33	0.47	
Low	1852	0,1	0.33	0.47	
Respondents' characteristics					
Male respondent	309	0,1	0.35	0.48	
Age	309	21 – 34	23.84	1.97	24
<u>Partnership status (ref.: No relation)</u>					
Short-term relation	309	0,1	0.12	0.32	
Long-term relation	309	0,1	0.29	0.45	
Cohabiting	309	0,1	0.17	0.38	
Intolerance of uncertainty	309	1.08 – 4.67	2.38	0.64	2.33
General self-efficacy	309	1.70 – 4.00	3.12	0.36	3.10

5.4   Results

5.4.1   Migration aspirations

Figure 5-2 displays the distribution of respondents' aspiration to migrate to the hypothetical destinations described in the vignettes for a stay of a maximum of one year, and more than three years respectively. Interestingly, for the majority of vignettes, respondents rated their aspiration to migrate for a maximum of one year with a six out of ten or higher. The aspiration to migrate for more than three years was with the median at four out of ten clearly much lower. Compared to previous factorial surveys measuring the aspiration to migrate amongst couples (Abraham et al., 2010) and academic staff (Petzold, 2017), students' aspiration to migrate appeared rather high, even for long-term moves. Answers on the scale measuring the aspiration to migrate were not normally distributed, particularly for long-term moves. However, as ordinal regression models yielded similar results, below we continue with the more straightforward interpretation of an ordinary least squares (OLS) model.
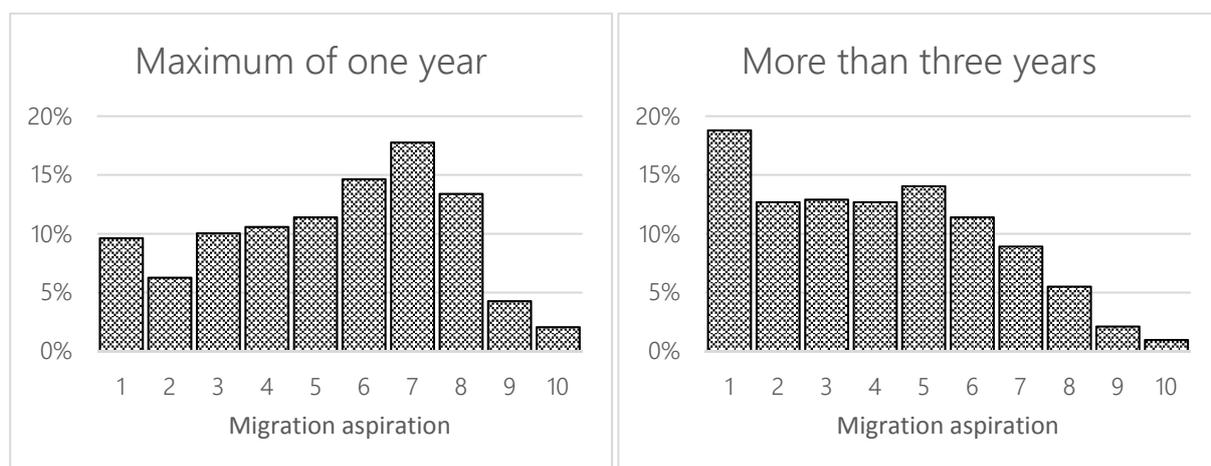

Figure 5-2 Distribution of the dependent variable: aspiration to migrate for a maximum of one year and more than three years

5.4.2   Test of the hypotheses

We started by estimating an empty model. The interclass correlation (ICC) indicated that for short-term moves about 53% of the variance in migration

aspirations can be attributed to the individual level, and for longer moves 60%. Thus, individual differences clearly explained a large part of the variation in the aspiration to migrate. Subsequently, we estimated a random intercept model containing the vignette characteristics, as well as respondents' characteristics *age*, *sex*, *partnership status* and their scores on *risk-aversion* and *generalized self-efficacy* scales (Model 1, Table 5-3 & Table 5-4). Effects of the vignette variables in this model represent a shared understanding of how the vignettes' dimensions affected respondents' judgments.

5.4.3 *Main effects of vignette dimensions and personality traits*

For both short-term and longer moves, the results were broadly in line with our hypotheses on the main effects of welfare state arrangements on the aspiration to migrate. That is, the aspiration to migrate was higher when the level of unemployment benefits in the destination country was higher (*H1*). Nevertheless, the more important factor seemed to be that it was not *lower* than in the origin country. The aspiration to migrate was lower when the waiting time for immigrants to access unemployment benefits in the destination country was longer (*H2*), and when the personal costs of healthcare were higher (*H3*). Lower costs of healthcare abroad than in the origin country did not have a significant influence on respondents' aspiration to migrate. Effects of the remaining dimensions on respondents' aspiration to migrate were also in the expected direction: respondents were more willing to move when wages and job prospects in the described destination country were better than in the origin country. On the other hand, they were less willing to move when it required more effort to learn the language of the destination country.

With respect to personality characteristics, more risk-averse individuals were found to be less willing to move for less than a year. No significant effect of risk-aversion on migration aspirations was found for moves of more than three years. Scores on generalized self-efficacy did not have a significant impact on migration aspirations for both short-term and longer moves. We did not find significant differences between male and female students or for those of different

ages. The only control variable that was relevant was relationship status, with those who cohabited with their partner having lower migration aspirations.

5.4.4   Impact of time dimension

Because of the standardized design, coefficients of the models for short- and long-term moves could be compared directly. We find some interesting differences between the two frames under study: The negative impact of a waiting time of two years to access unemployment benefits as compared to six months was only significant for moves shorter than a year. This finding suggests that it is not so much the waiting time of two years that decreases individuals' aspirations to migrate, but rather the fact that they would not be able to access these benefits within their expected stay. Higher wages and job chances in the destination country appeared particularly important factors for short-term moves. The negative impact of a more difficult language furthermore was stronger for short-term than for long-term moves.

5.4.5   Interactions with economic circumstances

Next, we tested interaction effects between the welfare state-related and economic characteristics of the hypothetical destination country, to find out whether the impact of welfare state arrangements on the aspiration to migrate varied under different economic circumstances. The interaction term of higher job chances and a higher level of unemployment benefits in the destination country compared to the country of origin was the only coefficient that reached statistical significance at the .05 level (Model 2, Table 5-3 & Table 5-4). In contrast with what we expected (*H4a*), the regression estimate was positive, indicating that better job prospects particularly increased the aspiration to migrate when combined with higher levels of unemployment benefits. Furthermore, the interaction was stronger for long-term moves, and the main effect of better job prospects no longer reached statistical significance at the .05 level in this model.

Table 5-3 Summary of linear regression analysis for variables predicting aspiration to migrate for a maximum of one year (random intercept models)

	Model 1 B	(SE)	Model 2 B	(SE)	Model 3 B	(SE)	Model 4 B	(SE)
Vignettes' characteristics								
Wage (ref. Comparable)								
Higher	0.42***	(0.08)	0.43***	(0.08)	0.42***	(0.08)	0.42***	(0.08)
Lower	-0.50***	(0.08)	-0.48***	(0.08)	-0.49***	(0.08)	-0.50***	(0.08)
Job chances (ref. Comparable)								
Higher	0.51***	(0.09)	0.33**	(0.12)	0.51***	(0.09)	0.52***	(0.09)
Lower	-0.87***	(0.09)	-0.91***	(0.09)	-0.87***	(0.09)	-0.87***	(0.09)
Level of unemp. benefits (ref. Comparable)								
Higher	0.19*	(0.08)	0.04	(0.11)	-0.34	(0.26)	-1.03	(0.59)
Lower	-0.33***	(0.08)	-0.31***	(0.08)	-0.32***	(0.08)	-0.33***	(0.08)
Access to unemp. benefits (ref. 6 months)								
Immediately	0.25**	(0.08)	0.24**	(0.08)	0.25**	(0.08)	0.26**	(0.08)
2 years	-0.17*	(0.08)	-0.18*	(0.08)	-0.18*	(0.08)	-0.17*	(0.08)
Costs of healthcare (ref. Comparable)								
Higher	-0.41***	(0.08)	-0.41***	(0.08)	-0.40***	(0.08)	-0.41***	(0.08)
Lower	-0.04	(0.08)	-0.05	(0.08)	-0.04	(0.08)	-0.04	(0.08)
Effort to learn language (ref. Moderate)								
High	-0.64***	(0.08)	-0.64***	(0.08)	-0.64***	(0.08)	-0.64***	(0.08)
Low	0.26***	(0.08)	0.28***	(0.08)	0.27***	(0.08)	0.26***	(0.08)
Vignette ID	-0.02*	(0.01)	-0.02**	(0.01)	-0.02*	(0.01)	-0.02*	(0.01)
Vignette order	-0.06*	(0.02)	-0.04	(0.02)	-0.06*	(0.02)	-0.06*	(0.02)
Respondent characteristics								
Male	0.11	(0.22)	0.10	(0.22)	0.11	(0.22)	0.11	(0.22)
Age	0.07	(0.05)	0.07	(0.05)	0.07	(0.05)	0.07	(0.05)
Partnership status (ref: Single)								
Short-term partner	0.04	(0.34)	0.04	(0.34)	0.04	(0.34)	0.04	(0.34)
Long-term partner	-0.19	(0.25)	-0.18	(0.25)	-0.19	(0.25)	-0.19	(0.25)
Cohabiting with partner	-0.79**	(0.30)	-0.79**	(0.30)	-0.79**	(0.30)	-0.79**	(0.30)
Intolerance of uncertainty	-0.46**	(0.17)	-0.46**	(0.17)	-0.53**	(0.17)	-0.46**	(0.17)
General self-efficacy	0.34	(0.30)	0.33	(0.30)	0.34	(0.30)	0.21	(0.31)
Interaction terms								
Unemp.ben.level higher X Job chances higher			0.48*	(0.22)				
Uncertainty X Unemp.ben. higher					0.23*	(0.11)		
Self-efficacy X Unemp.ben. higher							0.39*	(0.19)
Constant	4.86**	(1.68)	5.02**	(1.69)	5.02**	(1.68)	5.26**	(1.69)
Observations	1852		1852		1852		1852	
(*N* Respondents)	(309)		(309)		(309)		(309)	
Variance								
Respondents	2.93	(0.26)	2.94	(0.26)	2.93	(0.26)	2.93	(0.26)
Vignettes	1.84	(0.07)	1.83	(0.07)	1.83	(0.07)	1.84	(0.07)

*Standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001*

Table 5-4 Summary of linear regression analysis for variables predicting aspiration to migrate for more than three years (random intercept models)

	Model 1		Model 2		Model 3		Model 4	
	B	(SE)	B	(SE)	B	(SE)	B	(SE)
Vignettes' characteristics								
Wage (ref. Comparable)								
Higher	0.29***	(0.07)	0.30***	(0.07)	0.29***	(0.07)	0.28***	(0.07)
Lower	-0.46***	(0.07)	-0.43***	(0.07)	-0.46***	(0.07)	-0.46***	(0.07)
Job chances (ref. Comparable)								
Higher	0.37***	(0.08)	0.16	(0.11)	0.37***	(0.08)	0.38***	(0.08)
Lower	-0.83***	(0.08)	-0.87***	(0.09)	-0.83***	(0.08)	-0.82***	(0.08)
Level of unemp. benefits (ref. Comparable)								
Higher	0.19*	(0.07)	0.01	(0.10)	-0.16	(0.25)	-1.14*	(0.56)
Lower	-0.28***	(0.08)	-0.26***	(0.08)	-0.28***	(0.08)	-0.28***	(0.08)
Access to unemp. benefits (ref. 6 months)								
Immediately	0.26***	(0.08)	0.24**	(0.08)	0.26***	(0.08)	0.26***	(0.08)
2 years	-0.07	(0.08)	-0.08	(0.08)	-0.07	(0.08)	-0.07	(0.08)
Costs of healthcare (ref. Comparable)								
Higher	-0.36***	(0.08)	-0.37***	(0.08)	-0.36***	(0.08)	-0.37***	(0.08)
Lower	-0.06	(0.08)	-0.08	(0.08)	-0.06	(0.08)	-0.06	(0.08)
Effort to learn language (ref. Moderate)								
High	-0.43***	(0.07)	-0.43***	(0.07)	-0.43***	(0.07)	-0.42***	(0.07)
Low	0.27***	(0.07)	0.29***	(0.07)	0.27***	(0.07)	0.27***	(0.07)
Vignette ID	-0.01	(0.01)	-0.02*	(0.01)	-0.01	(0.01)	-0.01	(0.01)
Vignette order	0.01	(0.02)	0.04	(0.02)	0.02	(0.02)	0.01	(0.02)
Respondent characteristics								
Male	0.29	(0.23)	0.29	(0.22)	0.29	(0.22)	0.29	(0.23)
Age	0.09	(0.05)	0.09	(0.05)	0.09	(0.05)	0.09	(0.05)
Partnership status (ref: Single)								
Short-term partner	-0.12	(0.35)	-0.12	(0.35)	-0.12	(0.35)	-0.12	(0.35)
Long-term partner	-0.50	(0.26)	-0.49	(0.26)	-0.50	(0.26)	-0.50	(0.26)
Cohabiting with partner	-1.02***	(0.31)	-1.02***	(0.31)	-1.02***	(0.31)	-1.02***	(0.31)
Intolerance of uncertainty	-0.20	(0.17)	-0.20	(0.17)	-0.24	(0.18)	-0.19	(0.17)
General self-efficacy	0.13	(0.31)	0.12	(0.31)	0.13	(0.31)	-0.02	(0.32)
Interaction terms								
Unemp.ben.level higher X Job chances higher			0.56**	(0.20)				
Uncertainty X Unemp.ben. higher					0.15	(0.10)		
Self-efficacy X Unemp.ben. higher							0.42*	(0.18)
Constant	2.83	(1.72)	3.03	(1.72)	2.94	(1.72)	3.27	(1.73)
Observations	1852		1852		1852		1852	
(*N* Respondents)	(309)		(309)		(309)		(309)	
Variance								
Respondents	3.10	(0.27)	3.09	(0.27)	3.09	(0.27)	3.10	(0.27)
Vignettes	1.64	(0.06)	1.63	(0.06)	1.64	(0.06)	1.64	(0.06)

*Standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001*

5.4.6   Interactions with personality traits

To test whether the impact of welfare state arrangements on the migration aspiration varied with personality traits, cross-level interactions for the vignette characteristics and individuals' risk-aversion and generalized self-efficacy were estimated (Model 3&4, Table 5-3 & Table 5-4). We expected welfare state arrangements to be more important for migration aspirations of more risk-averse persons (*H5a*), and less important for persons with higher generalized self-efficacy (*H5b*). As observed in the first models, respondents who were more risk-averse were significantly less willing to move for a maximum of one year. However, and in line with what we expected, the significant interaction effect in Model 3 indicates that this negative impact was weaker when the level of unemployment benefits in the destination country was higher. Interestingly, we did not find a similar effect for long-term moves. The interaction effect of generalized self-efficacy and higher levels of unemployment benefits was positive and significant as well. However, the main effects were only significant for long-term moves. Different from the previous models, higher levels of unemployment benefits in the destination country in this model had a negative impact on the aspiration to move. The interaction effect indicated that this impact is weaker (i.e., more positive) for respondents with higher generalized self-efficacy.

5.5   Discussion

In the absence of micro-data that would enable individual-level analysis, previous studies often approached the relationship between migration and the welfare state from a macro-perspective (e.g., Geis et al., 2013; Jackson et al., 2013; Josifidis et al., 2014; Kurekova, 2013; Palmer & Pytlikova, 2015; Razin & Wahba, 2015). Yet crude measures of welfare generosity like total government spending typically used in these studies cannot fully uncover the role of the welfare state in shaping migration aspirations. In this study we therefore aimed to address this question at the micro-level, introducing a factorial survey design. Over 300 Dutch Master students indicated for a number of hypothetical destination countries to what extent they would be willing to migrate there after graduation. The experimental

design of the study allowed for full control over the conditions in the proposed scenarios, as well as the information respondents had at their disposal. Furthermore, we included well-established scales on self-efficacy and risk aversion in the survey. In result, besides direct influences of welfare state characteristics on migration aspirations, we could investigate interactions of these dimensions with economic circumstances and personality traits. This way, we were able to test whether characteristics of welfare state arrangements in the field of health and unemployment had an attracting, discouraging or facilitating impact on migration aspirations.

Our findings illustrated that welfare state arrangements can have both an attracting and a discouraging influence in shaping migration aspirations. On the one hand, higher levels of unemployment benefits in the destination country compared to the origin country were found to increase migration aspirations. Higher costs of healthcare on the other hand lowered migration aspirations, as did longer waiting times to access unemployment benefits for short-term moves. As the latter effect was not significant for long-term moves, it appears that individuals responded negatively to longer waiting times when these restricted welfare access during the full length of stay. Welfare state arrangements were also found to have an facilitating influence in shaping migration aspirations in combination with economic circumstances and personality traits. Higher levels of unemployment benefits particularly increased aspirations to migrate when combined with better job prospects. Furthermore, higher levels of unemployment benefits increased migration aspirations of risk-averse individuals for short-term moves, likely by reducing aversive reactions to uncertainty that may discourage these people to migrate. Finally, higher levels of unemployment benefits seemed to act as a strategy to cope with unforeseen events for individuals with high generalized self-efficacy.

Our analytical approach contributes to the previous literature in three important ways. First, prior studies on the role of the welfare state in migration decisions mainly focused on individuals who actually migrated. Furthermore, the economic theories on which most of these studies are based assume people to move to places where their economic returns are the highest. Prospect theory on the

other hand argues that people think in terms of gains and losses *relative* to their status quo rather than in terms of actual wealth (Clark & Lisowski, 2017; Kahneman & Tversky, 1979). In our study we therefore looked at migration aspirations, which enabled us to test to what extent the welfare state in the destination country influences considerations on whether or not to migrate for a broader group of people, and as compared to their current situation. In line with prospect theory, we found less beneficial circumstances in the hypothetical destination country compared to the origin country to have a stronger negative impact on individuals' migration aspirations than more preferable circumstances had a positive impact. This tendency could be observed for economic factors (job chances and wages), but also for characteristics of the welfare state (level of unemployment benefits and costs of healthcare). These findings highlight the importance of understanding migration decisions not just from opportunities in the destination country, but also from potential losses in the origin country. This is particularly relevant as international migration studies are still often characterized by a destination country bias.

Second, we tested whether the strength of the impact of welfare state arrangements on migration aspirations differed depending on personality. As migration decisions are inherently risky, we expected personality traits related to the willingness to enter novel situations to play a role in migration aspirations. In line with previous literature, we found more risk-averse individuals to be less willing to migrate for less than a year. No such impact was found for long-term stays of more than three years. The latter can be explained as long-term plans are possibly less concrete, and therefore less threatening. Alternatively, risk-averse persons may prefer to make long-term plans (in order to perceive control over their life), and in turn perceive a short-term stay abroad as less attractive. Innovatively, our findings illustrated that more risk-averse individuals were more willing to migrate short-term when unemployment benefits in the destination country were more generous. As a second personality trait, we looked at generalized self-efficacy. In contrast to what we expected, in our sample higher levels of unemployment benefits in the destination country increased the aspiration to migrate for more than three years only for individuals with a high generalized self-

efficacy. This personality trait was measured by means of a validated scale capturing how well respondents felt they can manage unexpected events. The finding therefore possibly indicates that unemployment benefits are considered by individuals who score high on this scale as a way to cope with unforeseen problems that may arise while being abroad, particularly for a longer period of time. As respondents in our sample overall scored rather high on generalized self-efficacy, it remains to be seen how these findings transfer to other populations with lower levels of self-efficacy. Significant interaction effects between welfare state arrangements and respondents' personality traits support the notion that migration models can be improved from incorporating such traits (Williams & Baláž, 2012). The interactions provide an explanation for why under the same circumstances some individuals choose to leave whereas others choose to stay (Boneva & Frieze, 2001).

Third, we explored the impact of the temporality of migration on aspirations to migrate. Different results for short-term and long-term moves illustrated how characteristics of the destination country may shape a single person's aspiration to migrate differently depending on the anticipated length of stay. Our findings also showed that the role of personality traits in shaping migration aspirations can vary with the temporality of migration. Future research on migration aspirations and the factors shaping them would therefore benefit from including the element of duration of stay more explicitly.

Despite these important advantages of a factorial survey approach for studying how characteristics of the welfare state may affect individuals' aspirations to migrate, a number of limitations should be mentioned as well. First of all, experimental approaches are criticized for their inability to replicate real life. In our design we for instance described hypothetical destination countries by six dimensions, which by definition is a reduction of the complex reality. Nevertheless, it should be clear that experiments are designed to be relatively simple to enhance control and examine targeted aspects of the subject under study (Friedman & Sunder, 1994). Experimental research thus does not try to replicate the full complexity of reality, but deliberately approximates real life (Baláž & Williams, 2017).

Second, the sample in this study consists of Master students, which is a highly selective target group. Student samples are frequently used in studies with an experimental design due to their availability, quick learning, and – where applicable – relatively low financial incentives (Feltovich, 2011). In addition, a sample of Master students can be expected to be rather homogeneous in terms of life stage and socio-economic status. In our study, the vignettes furthermore were connected to the situation of our respondents, that is, the period after their upcoming graduation. Although these characteristics of our sample increase the internal validity of our study, it is less clear whether the findings are representative for other populations. In addition, individuals in our sample were relatively young, and did not have children (yet). Welfare state arrangements like family benefits and old-age pensions therefore seemed less relevant to the personal situation of our respondents, and for this reason were not included in the vignettes. Nevertheless, it could well be that these arrangements are of importance to individuals' migration aspirations in other stages of their lives. The external validity of our approach should therefore be addressed by replicating the experiment for different target groups and including additional welfare domains.

A final drawback of our approach is that it is unclear to what extent the reported aspiration to migrate is indicative of a clear intention and subsequent actual behaviour. According to the theory of reasoned action, behavioural intentions are the result of individuals considering different behavioural options, evaluating their consequences, and making a decision on whether or not to act (Fishbein & Ajzen, 1975). In this theory, intention is a direct determinant to actual behaviour (Remhof et al., 2014). Although we are unable to make this link in our study, research on internal migration (e.g., De Groot, Mulder, & Manting, 2011; G. F. De Jong, Root, Gardner, Fawcett, & Abad, 1985; Duncan & Newman, 1976; Kan, 1999) as well as some on international migration behaviour (Gardner, De Jong, Arnold, & Cariño, 1985; Van Dalen & Henkens, 2008) suggest that migration aspirations are good predictors of future migration.

In the literature, it has been suggested that welfare state arrangements might be particularly important to low-skilled migrants, as they would benefit the most from a generous welfare state (e.g., Razin & Wahba, 2015). Alternatively, in

this study we focused on the migration aspirations of high-skilled individuals. Despite the specific features of our target group, characteristics of the welfare state included in the study had an influence on respondents' aspiration to migrate. Our findings therefore indicate that welfare state arrangements may not just matter to low-skilled migrants, but also to the higher educated. Our findings further show how welfare state arrangements can shape migration aspirations through different mechanisms. Higher levels of benefits increase the aspiration to migrate, whereas higher costs or restricted welfare access reduce it. Unemployment benefits further were found to have an enabling effect on the aspiration to migrate by protecting against both actual and perceived risks. These different mechanisms, which can occur simultaneously, help explain the mixed results of previous studies using a less targeted approach to operationalize welfare generosity.

The stronger positive impact of higher job chances on migration aspirations when combined with higher unemployment benefits in our study signals a preference of individuals for destinations with the lowest levels of economic uncertainty. The weaker negative impact of risk-aversion on migration aspirations when combined with higher unemployment benefits further shows that welfare state arrangements can encourage people to migrate who otherwise would have stayed. Finally, higher levels of unemployment benefits seemed to particularly increase long-term migration aspirations for individuals with high levels of generalized self-efficacy. These are important findings, as measures to restrict migrants' welfare access are regularly proposed in national politics. Our study indicates that such restrictive measures may lower the migration aspirations of high-skilled individuals, who are typically expected to have a positive impact on the economy of the receiving country. Furthermore, our findings suggest the need for a change in paradigm in the study of the role of the welfare state in migration decision-making and conceptualize it much more as a form of protection instead of a magnet.