

## RESEARCH ARTICLE

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# The role of the origin country in migration aspirations: A cross-national comparison of Master students in Portugal and the Netherlands

Petra Wieke de Jong<sup>1</sup>  | María Lucinda Fonseca<sup>2</sup> 

<sup>1</sup>Netherlands Interdisciplinary Demographic Institute (NIDI) /KNAW/UoG, The Hague, The Netherlands

<sup>2</sup>Center for Geographical Studies Edificio IGOT, Institute of Geography and Spatial Planning, Lisbon, Portugal

## Correspondence

Petra W. de Jong, Netherlands Interdisciplinary Demographic Institute (NIDI)/KNAW/UoG, Lange Houtstraat 19, 2511CV The Hague, The Netherlands.  
Email: jong@nidi.nl

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## Abstract

With this comparative study, we aim for a better understanding of the role of the origin country in shaping migration aspirations. Using experimental data collected among a sample of Master students in Portugal and the Netherlands, we tested whether the impact of labour market and welfare state-related factors on migration aspirations varied between these two origin countries. In line with our expectation, potential gains of migration in terms of job opportunities and wages had a stronger positive impact on migration aspirations for the Portuguese as compared with the Dutch respondents. For Portugal and the Netherlands alike, migration aspirations were lower when the level of unemployment benefits in the destination country was lower than in the origin country. Our findings indicated that conditions in the origin country, as well as the individual's life stage, shape which characteristics of the destination country are most important for migration aspirations.

## KEYWORDS

aspirations, experimental design, migration, origin country, Portugal, the Netherlands

## 1 | INTRODUCTION

In a context characterised by the right to freedom of movement and increasing numbers of mobile people, understanding what stimulates individuals to move across borders has become of great relevance in contemporary European societies. Although migration research has long focused on the impact of immigration on receiving countries, in the light of issues like “brain drain” and aging populations, the perspective of the origin country has gradually started to receive more attention as well. However, to identify the main drivers of migration, empirical studies often focus on individuals who actually migrated (Abraham, Auspurg, & Hinz, 2010; van Dalen & Henkens, 2012). Furthermore, many studies primarily seek to explain the size and direction of migration flows by means of characteristics of the destination

country, while grouping individuals from fairly different origin countries together (De Giorgi & Pellizzari, 2009; Geis, Uebelmesser, & Werding, 2013; Giulietti, Guzi, Kahanec, & Zimmermann, 2013). Approaches like these illustrate how large parts of the migration literature are still characterised by a destination country bias. An important question thus remains whether the same factors determine the willingness to migrate for individuals across different origin countries.

In this study, we therefore shift our attention to conditions in the origin country while investigating migration aspirations. By means of experimental data, we test how disparities in job opportunities, wages, and the level of unemployment benefits influence the migration aspirations of young adults who soon start their working career under fairly different circumstances: Master students in Portugal and the Netherlands. This way, we aim to contribute to a better understanding

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of how the origin country influences individuals' evaluation of characteristics of the destination country when considering the possibility of migration.

In our analyses, we specifically look at the migration aspirations of Master students for several reasons. First, our focus on Master students increases the internal validity of our study. From previous research, we know that people's motives for migration strongly depend on the social situation they are currently in. For instance, economic motives are more important for individuals who are (soon to be) active on the labour market, whereas better public services are valued more by groups that benefit from these services (Hadler, 2006). Because a sample of Master students is rather homogeneous in terms of life stage and level of education, we can make meaningful comparisons between the two origin countries. Second, 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; Kley & Mulder, 2010; Remhof, Gunkel, & Schlaegel, 2014). Related to this, a focus on Master students allows us to connect our measure of migration aspirations to the specific situation of our respondents, that is, the period after their upcoming graduation. Finally, students generally tend to express higher mobility intentions as compared with those not enrolled in education, as they have relatively little economic and household commitments (Van Mol, 2016). Higher educated individuals are also more likely to become actual migrants because of better opportunities to realise their migration potential (Docquier, Peri, & Ruysen, 2014). National governments typically wish to attract or retain high-skilled individuals, because of their positive impact on the economy. Understanding which factors shape the migration aspirations of Master students is therefore of utmost importance for migration scholars as well as policymakers in both countries of origin and destination.

## 2 | THEORY

### 2.1 | The role of the origin country in migration decisions

To explain migration decisions, neoclassical and other conventional migration theories focus predominantly on structural disparities between the countries of origin and destination (Castles, De Haas, & Miller, 2014). According to these perspectives, structural inequalities in terms of wages and job opportunities create a context that makes migration more likely (Cairns, de Almeida Alves, & Growiec, 2014). In line with such reasoning, prior research confirmed that immigrants from less developed countries move more often towards countries with higher wages and lower unemployment rates (e.g., Mayda, 2010; Ortega & Peri, 2012). Yet although neoclassical models account for a significant share of the migration literature, the framework has been criticised for unrealistically assuming perfect knowledge of future migrants (Baláz, Williams, & Fifeková, 2016; de Haas, 2011). After all, in reality, the long-term consequences of migration on an individual's situation are difficult to predict, which makes migration decisions

inherently uncertain. Moreover, the framework fails to explain why migration rates are relatively low considering the significant income differentials that exist between many countries (Carling & Collins, 2018).

According to the New Economics of Labour Migration (NELM), under conditions of crisis and adversity, the prime motive of migration is to spread income risks and to overcome situations of relative deprivation (e.g., de Haas, 2010; Stark, 1991; Taylor, 1999), rather than maximising income like neoclassical models predict. In a similar vein, the prospect theory emphasises that people think in terms of gains and losses in relation to their status quo (Kahneman & Tversky, 1979) and that people are generally more concerned about losing what they have than about what they might gain (Czaika, 2015). These theoretical frameworks explain that people can make different choices about the same likely outcomes of moving, depending on their reference points (Clark & Lisowski, 2017). This argument has important implications for the study of migration, as it acknowledges that the reference point can add value to staying. The notion of loss aversion helps to explain why many individuals do *not* move, despite promising opportunities abroad. However, because most empirical studies on migration concentrated on individuals who actually migrated, we know much less about a possible retaining effect of favourable conditions in the origin country.

### 2.2 | The importance of migration aspirations

According to the three-stage model of migration decision-making (Kley, 2017; Kley & Mulder, 2010), any kind of voluntary migration starts with *considering* to move. Subsequently, the step from *considering* to *planning* the move indicates that a decision has been made in favour of moving. Finally, concrete plans to migrate are understood as the most important predictor of *realising* the move. By distinguishing a predecisional stage of migration, the three-stage model acknowledges that not all people consider migration as a possible way to act (e.g., Speare, 1974). Explicitly modelling a predecisional stage of migration therefore better allows researchers to determine where the wishes and desires that initiate migration aspirations come from and, in turn, which individuals are "at risk" of migration decision-making (Kley, 2017). In other words, analysing which factors increase migration aspirations represents an essential step in understanding migration decisions.

In a recent study by Baláz and Williams (2018), respondents from Italy and Spain attached more value to unemployment and wage levels when deciding where to migrate to, whereas respondents from Ireland, Germany, Sweden, and the United Kingdom attached more value to climate. In line with the main proposition of the prospect theory, these findings indicate that the factors influencing migrants' locational choices are shaped by circumstances in the origin country. Findings like these raise the question whether circumstances in the origin country also shape the factors that determine individuals' migration aspirations, that is, their conviction that leaving would be better than staying (Carling & Collins, 2018). To answer this question,

in this study, we investigate migration aspirations across two origin countries, Portugal and the Netherlands. Although the two countries differ in various respects, in our analyses, we focus on three dimensions central to the migration literature: job opportunities, wages, and unemployment benefit levels.

### 2.3 | Comparing Portugal and the Netherlands

Portugal is one of the European countries hit hardest by the economic crisis of 2008. After the onset of the crisis, Portugal entered economic adjustment programmes to improve its national debt situation. Although the impact of austerity measures is being felt among various sociodemographic groups, unemployment rates in Portugal are particularly high among young adults with tertiary-level qualifications (Dotti Sani & Magistro, 2016). Graduates who in the past enjoyed a relatively high degree of labour market advantage now struggle to find a suitable job. Although the Netherlands also experienced economic downturn, the country largely escaped the economic problems southern European countries faced after the crisis. In 2017, only 4% of the people aged 15 to 24 in the Netherlands were neither in employment nor in education and training—one of the lowest youth unemployment rates within Europe (Eurostat, 2019). Average wage levels across the two countries also reflect the differences in economic circumstances: In 2018, the average annual wage was 17,240 euro in Portugal against 47,422 euro in the Netherlands (Organisation for Economic Co-operation and Development, 2019).

High levels of public debt in Portugal not just followed from recent rises in state expenditure at a time of low economic growth, but can be traced back to a long period of underdevelopment during the years of totalitarian dictatorship between 1926 and 1974 (Cairns et al., 2014). After 1974, the Portuguese government elevated the public expenditure to bring the country's educational and social welfare infrastructure up to the level of other European countries. Nowadays, unemployment benefits are with replacement rates around 75% comparable across Portugal and the Netherlands (Bruzelius, Reinprecht, & Seeleib-Kaiser, 2017; Scruggs, Kuitto, & Jahn, 2018). Nevertheless, because of the differences in net annual earnings, the weekly unemployment benefit is on average more than twice as high in the Netherlands as in Portugal (Bruzelius et al., 2017). Even when the absolute amounts are corrected for purchasing power as reported by the Organisation for Economic Co-operation and Development (2020), these figures indicate that the Dutch government provides more generous income support in case of unemployment.

### 2.4 | Hypotheses

To recapitulate, according to neoclassical migration models, we could expect individuals to migrate if doing so would increase their lifelong utility. However, theoretical frameworks like NELM and the prospect theory highlight that conditions in the origin country are another relevant dimension for migration. Higher wages and better job

opportunities in the destination country may especially increase migration aspirations when the opportunity structure in the origin country is limited, whereas these factors may provide insufficient reason to emigrate for individuals from origin countries with a strong economy. In other words, economic “push” factors in the origin country potentially influence the role of “pull” factors in the destination country. Given the structural conditions in the two origin countries included in our study, and in the light of the theoretical reasoning above, we therefore formulate the following hypothesis: *Better job opportunities and higher wages in the destination country as compared with the origin country will have a stronger positive impact on migration aspirations in Portugal as compared with the Netherlands (H1).*

Besides factors related to the labour market, migration scholars frequently considered the welfare state as one of the determinants of migration. Central to this literature is the “welfare magnet hypothesis,” the expectation that immigrants will move towards destinations with the most generous welfare provisions (Borjas, 1999). Although the welfare magnet hypothesis has found support in the context of internal mobility within the United States (e.g., McKinnish, 2007; Southwick, 1981), results are more mixed for studies on international migration (e.g., De Giorgi & Pellizzari, 2009; Giulietti et al., 2013). In fact, several studies demonstrated that immigrants tend to have limited knowledge about welfare provisions in the destination country (de Jong & de Valk, 2019; Renema, Meuleman, & Lubbers, 2017). Whereas Borjas (1999) emphasised the role of welfare provisions in the destination country, Massey (1998) argued that people are likely less motivated to emigrate when the welfare system in the origin country provides social security in the form of income support and healthcare. In other words, a generous welfare state in the origin country may act as a kind of risk insurance, which individuals are not ready to revoke by migrating to another country with lesser social protection (Fouarge & Ester, 2008). Some initial evidence has shown that increasing levels of welfare benefits in the origin country are indeed associated with decreasing emigration rates (Kureková, 2011). Thus, we can expect that migration aspirations are lower when levels of social protection are lower in the destination country than in the origin country, yet especially in origin countries with a relatively generous welfare state: *Lower unemployment benefit levels in the destination country as compared with the origin country will have a stronger negative impact on migration aspirations in the Netherlands as compared with Portugal (H2).*

### 2.5 | Other factors influencing migration aspirations

Besides income disparities between the country of origin and destination, migration models often consider the costs of a move across borders to explain migration decisions. For instance, the barrier to move may be lower for destination countries that are more similar to the origin country in terms of language (Belot & Ederveen, 2006). Individuals may also face higher costs to access welfare after migration, for example, when welfare provisions involve higher contributions in the

destination country, or when longer waiting times to access them apply to immigrants (Geis et al., 2013). In our analyses, we include such costs of migration as control variables. Furthermore, individuals may express different migration aspirations depending on the anticipated length of stay abroad (Fouarge & Ester, 2008). To explore the impact of the temporality of migration, we measure respondents' aspirations to move abroad for a maximum of 1 year and more than 3 years.

While previous research often considered the anticipated costs of migration to vary between individuals with different skill levels and labour market positions (e.g., Boyle, Halfacree, & Robinson, 1998; Massey, 1998), our sample is rather homogeneous in this respect due to our focus on Master students. However, in the analyses, we do control for several other personal characteristics of our respondents. First, close relationships have been found to attach people to the places they live in and to prevent them from moving abroad (e.g., Cairns & Smyth, 2011). This could mean that respondents with a partner—especially those who are cohabiting—are less willing to move across borders than those who are single. Second, individuals who migrated in the past likely have gained experience and established networks and thus may have a higher propensity to migrate again (e.g., Deléchat, 2001; Van Mol, 2016). We therefore include migration experience as a predictor of future migration aspirations. Third, a recent strand of literature has shown that migration decisions are shaped by personality traits. 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; Jaeger et al., 2010; van Dalen & Henkens, 2013). To take this dimension into account, our study includes a measure of respondents' intolerance of uncertainty. Finally, we control for possible composition effects of age and gender.

### 3 | DATA AND METHODS

To test our hypotheses, we use data from a factorial survey—an instrument that combines an experimental design with survey elements (for an overview, see Wallander, 2009). In the experimental part, researchers use hypothetical choice situations (or “vignettes”) to measure individuals' responses to different cost and benefit structures. The approach has a number of advantages that complement knowledge obtained through regular survey questions. First, respondents evaluate a number of dimensions simultaneously, which forces them to make trade-offs. Compared with single-item survey questions, a factorial survey therefore better resembles real-world decision-making processes (Jasso, 2006). Second, the experimental design makes it possible to draw conclusions about a causal connection between the vignette dimensions and migration aspirations (Baláz & Williams, 2018). Third, whereas most migration studies focused on individuals who actually migrated, a factorial survey

enables us to investigate migration aspirations of individuals who are still living in their origin country. This way, we also gain insight into the factors that stimulate staying rather than leaving.

#### 3.1 | Data collection

Data were collected within diverse Master programmes at Portuguese and Dutch universities between November 2017 and March 2018.<sup>1</sup> Especially for the Dutch sample, Master programmes within the social sciences were overrepresented. To recruit respondents, the researchers reached out to course coordinators within the Master programmes. Once a course coordinator agreed to cooperate, one of the researchers introduced the survey at the beginning or end of a lecture. Master students who decided to participate could fill out the questionnaires immediately and independently by means of a paper-and-pencil interview. The researcher remained present for questions and collected the questionnaires afterwards. Practically all students who were present during the lecture participated in the research. The Portuguese sample consisted of 307 respondents and the Dutch sample of 467 respondents, together evaluating a total of 4,644 vignettes.

#### 3.2 | Measurement instrument

The first part of our questionnaire contained a number of questions on individual characteristics like age, partnership status, socio-economic background, and migration experience. Subsequently, the experimental part of the survey was introduced as follows:

After graduation your search for a job will start. You can choose to stay in [Portugal/the Netherlands] or go abroad. Below you will find the descriptions of 6 countries. For each of these scenarios, please indicate to what extent you would be willing to migrate to this country as opposed to staying in [Portugal/the Netherlands].

The hypothetical scenarios described the characteristics of potential destination countries as compared with the origin country (i.e., “higher than,” “comparable with,” and “lower than”). To avoid providing either too much or too little information, each vignette included a recommended number of six dimensions (Auspurg & Hinz, 2015). The dimensions and their levels are listed in Table 1. Figure 1 portrays an example of a vignette.

To estimate the impact of each dimension on respondents' judgments, the levels of the six dimensions were strategically varied across vignettes. As each dimension has three levels, our vignette universe consisted of  $3^6 = 729$  combinations. Due to this high number, not all combinations could be presented to our respondents. Instead, we obtained a D-efficient sample of vignettes, which provides the optimally efficient solution between perfect orthogonality and balance (see Kuhfeld, Tobias, & Garratt, 1994). Using the modified Federov

**TABLE 1** Vignette dimensions and levels

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

**FIGURE 1** Example of a vignette

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 at all    1   2   3   4   5   6   7   8   9   10   Very Much

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

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

search algorithm in a so-called Resolution IV, we drew a D-efficient sample of 54 vignettes (D-efficiency = 93.97; A-efficiency = 87.40; G-efficiency = 100.00).<sup>2</sup> The vignettes were randomly distributed to nine decks, each containing six vignettes (Auspurg & Hinz, 2015; Sauer, Auspurg, Hinz, & Liebig, 2011). That is, there were nine questionnaire versions, and each participant rated six hypothetical destination country profiles.

In the next part of the questionnaire, respondents were presented with a list of 13 topics derived from the migration literature. Among this list were not only factors that are central to economic models on migration, such as monthly wage after taxes, job opportunities, and living costs (e.g., Beine, Docquier, & Ozden, 2011; Docquier et al., 2014), but also cultural, historical, and geographical factors, like culture, climate, distance to the country of origin, and language difficulty (Belot & Ederveen, 2006; Ramos & Suriñach, 2017). As numerous studies have indicated the importance of migrant networks in migration decisions (e.g., Douglas & Caces, 1992; Haug, 2008), we further included the share of coethnics already living in the country as one of the topics that could be selected. Finally, following the literature on the role of welfare systems in migration decisions (e.g., Borjas, 1999; Giulietti & Wahba, 2012), we included social inequality, as well as specific welfare arrangements, such as the quality of education, healthcare, and old-age benefits. From this list, we asked respondents to select the three topics they deemed most important in deciding where to go in case they would plan to migrate to another European Union country for at least 1 year. The final section of the questionnaire contained the 12-item Intolerance of Uncertainty Scale as

constructed and validated by Carleton, Norton, and Asmundson (2007), to derive scores on this personality trait.

### 3.3 | 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?" and (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*. In the analyses, we treat these scales as continuous dependent variables, capturing migration aspirations for short-term and long-term moves. The vignette dimensions "wage," "job chances," "level of unemployment benefits," "access to unemployment benefits," "costs of healthcare," and "effort to learn the language" entered the analyses as categorical independent variables.

To control for individual characteristics, we included age, sex, partnership status, intolerance of uncertainty, and migration experience in the model. The variable "partnership status" distinguishes between singles, persons who are in a relationship but do not cohabite with their partner, and persons who do cohabite with their partner. The variable "migration experience" captures whether a respondent ever lived outside the origin country for more than 3 months (1 = *at least once*, 0 = *never*). As a measure of intolerance of uncertainty, we used a respondent's average score on the 12 items of the Intolerance of Uncertainty Scale (Cronbach's alpha = .87). To

control for possible effects of the design of the questionnaire, the analytical models presented below further include the vignette order and questionnaire version.<sup>3</sup>

### 3.4 | Sample

For the purpose of this study, foreign-born students were excluded from our sample ( $n = 188$ ). As we focused on a sample of Master students, our respondents are relatively comparable across the two countries in terms of their life stage and level of education. To obtain an even more homogeneous sample, we excluded respondents with children ( $n = 12$ ) as well as respondents older than 35 years ( $n = 5$ ). Respondents with missing values on any of the control variables gender and age were dropped from the sample ( $n = 2$ ). One respondent with a missing value on partnership status was grouped with those who did not have a partner. Furthermore, we removed respondents with more than one missing value on the 12 items of the Intolerance of Uncertainty Scale ( $n = 11$ ). After removing vignettes without an evaluation ( $n = 4$ ), we obtained our final sample of 3,332 vignettes, evaluated by 246 Portuguese and 310 Dutch students.

Table 2 presents the descriptive statistics for our sample. In the Dutch sample, ages of the respondents ranged from 21 to 34 years, with the majority being around 24 years old. Ages of the Portuguese respondents ranged from 19 to 35 years. The Portuguese sample was on average somewhat younger than the Dutch sample, with the majority being around 22 years old. In line with the gender distribution within the social sciences, males were underrepresented in our sample: 35% of males versus 65% of females for the Dutch sample and 31% of males versus 69% of females for the Portuguese sample. Less than half of the Dutch respondents were single (43%). Forty per cent had a partner but did not cohabite, and 17% lived together with

their partner. Among the Portuguese respondents, slightly more than half was single (54%). Only 9% lived together with their partner; the remaining 37% was in a relationship but did not cohabite. Respondents had on average moderate scores on the Intolerance of Uncertainty Scale (in Portugal 2.75 and in the Netherlands 2.38 on a scale from 1 to 5, with higher scores representing higher intolerance of uncertainty). Among the Portuguese respondents, 22% indicated to have migration experience; among the Dutch, this was 39%.

### 3.5 | Analytical strategy

In the analytical part of the paper, we first examine the distribution of the topics mentioned by our Portuguese and Dutch respondents as most important for choosing a destination country. The most often selected topics give insight into what types of factors could motivate individuals in these countries to move abroad. Next, we analyse the impact of the vignette dimensions on migration aspirations in the two countries. In these analyses, the evaluations of the vignettes are treated as the dependent variable.

## 4 | RESULTS

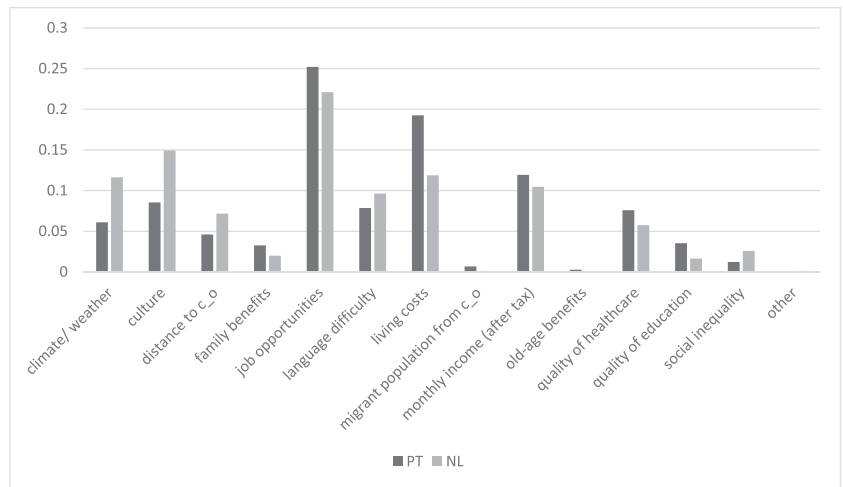
### 4.1 | Migration motives

Figure 2 portrays the distribution of the factors selected by our respondents as most important in deciding where to migrate to for at least 1 year. Both Portuguese and Dutch students selected "job opportunities" most frequently. At the same time, some interesting differences can be observed between the two countries. Compared with the Dutch, the economic factors "job opportunities," "costs of

**TABLE 2** Descriptive statistics

	Portugal				Netherlands									
	Mean	SD	Min	Max	Median	Mean	SD	Min	Max	Median				
DV: Migration aspiration														
Maximum 1 year	4.40	2.67	1	10	4	5.30	2.4	1	10	6				
More than 3 years	3.66	2.56	1	10	3	4.07	2.34	1	10	4				
Respondents' characteristics														
Male	0.31	0.46	0	1	0	0.35	0.48	0	1	0				
Age	22.81	2.72	19	35	22	23.85	1.98	21	34	24				
Partnership status														
No partner	0.54	0.50	0	1	1	0.43	0.49	0	1	0				
Partner, not cohabiting	0.37	0.48	0	1	0	0.40	0.49	0	1	0				
Partner, cohabiting	0.09	0.29	0	1	0	0.17	0.38	0	1	0				
Intolerance of uncertainty	2.76	0.66	1	5	2.83	2.38	0.64	1	5	2.33				
Migration experience	0.21	0.41	0	1	0	0.39	0.49	0	1	0				
N vignettes									1,474			1,858		
N persons											246			310

**FIGURE 2** Distribution of topics mentioned as most relevant in case of migration. Note: Data obtained from 246 Portuguese and 284 Dutch respondents (26 Dutch respondents were removed from the original sample because they selected more than three items)

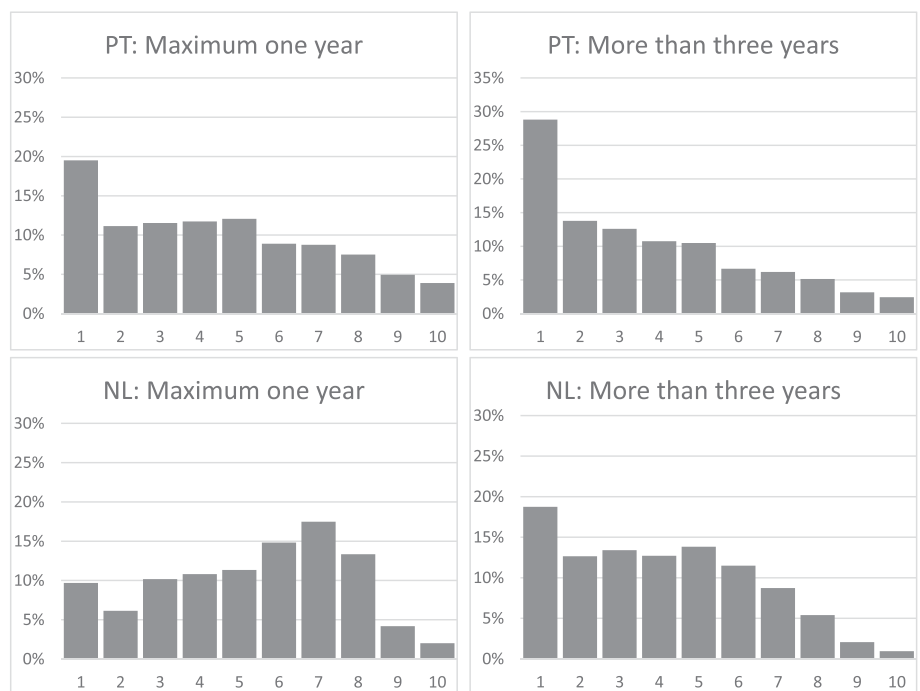


living,” and “monthly income (after taxes)” were more often selected by the Portuguese respondents. The Dutch respondents on the other hand attached more value to “culture,” “climate/weather,” and “language.” Originating from a poorer country, Portuguese Master students likely perceive migration more often as a strategy to improve their financial situation. This fits with neoclassical migration theories, which reason that international mobility figures as a possible solution when domestic labour market prospects are not very positive (Cairns et al., 2014). Dutch Master students, on the other hand, appear more interested in the lifestyle aspects of a move abroad. The welfare state-related factors “quality of healthcare,” “quality of education,” and “family benefits” were overall less frequently mentioned, although more often by Portuguese students. However, “social inequality,” which can be perceived as one of the outcomes of redistributive measures of the welfare state, was more often selected by Dutch

respondents. Of the listed factors, “old-age benefits” and “migrant-population from the origin country” appeared the least relevant to both groups.

#### 4.2 | Migration aspirations

Figure 3 displays the distribution of respondents' aspiration to migrate to the hypothetical destinations described in the vignettes for a stay of maximum 1 year and more than 3 years. Dutch respondents rated their aspiration to migrate for maximum 1 year with a 6 out of 10 or higher for most of the vignettes. The aspiration to migrate for more than 3 years is with the median at 4 out of 10, which is clearly much lower. Compared with previous factorial surveys measuring the aspiration to migrate among couples (Abraham et al., 2010) and academic



**FIGURE 3** Distribution of the dependent variable: aspiration to migrate for a maximum of 1 year and more than 3 years. Answers on a 1–10 Likert scale, with higher values representing higher migration aspirations

staff (Petzold, 2017), Dutch students' aspirations to migrate appear rather high, even for long-term moves. Portuguese students generally indicated lower aspirations to migrate for both maximum 1 year (median at 4 out of 10) and more than 3 years (median at 3 out of 10).

In the following parts, we investigate whether the dimensions of the vignettes have a different impact on migration aspirations between the two origin countries. 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). These models 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. For both Dutch and Portuguese respondents, answers on the scale measuring the aspiration to migrate are not normally distributed, particularly for long-term moves. However, because the results of ordered logistic regression models were substantially very similar, we continue below with the more straightforward interpretation of a linear regression model.

#### 4.2.1 | Null model

We start by estimating an empty model to assess which part of the variation in migration aspirations can be explained from individual differences. For the Dutch sample, the intraclass correlation indicates that for short-term moves, about 53% of the variance in migration aspirations can be attributed to the individual level and as much as 60% for longer moves. Thus, in the Netherlands, a large part of the variation in judgements is due to different respondents evaluating the vignettes. This could mean that the willingness to migrate among the Dutch depends more on individual characteristics than on macro-level factors, or that they consider other indicators as more important than those included in the vignettes. For the Portuguese sample, the share of variance explained from individual differences is much smaller: For short-term moves, 28% of the variance can be explained from variation between respondents and 32% for long-term moves. Thus, the vignette dimensions appear to have a stronger impact on migration aspirations in Portugal.

#### 4.2.2 | Separate models

Next, we estimate random intercept models for Portugal and the Netherlands separately, including both characteristics of the vignette and the individual. Table 3 presents the results of these models on the migration aspirations for maximum 1 year and more than 3 years. Effects of the vignette variables in these models represent a shared understanding of how the vignettes' dimensions affect respondents' judgements. For each dimension, the direction of the effect is comparable across Portugal and the Netherlands. The

aspiration to migrate is higher when wages, job chances, and unemployment benefit levels are higher abroad as compared with the origin country for both short-term and longer moves. Migration aspirations are also higher when it requires less effort to learn the language of the destination country. Migration aspirations are lower when wages, job chances, and unemployment benefit levels are lower, when the personal costs of healthcare are higher, and when it requires more effort to learn the language. The negative effect of a waiting time of 2 years to gain access to unemployment benefits is significant for moves of a maximum of 1 year, but not for moves of more than 3 years. Lower costs of healthcare abroad than in the origin country do not have a significant influence on respondents' aspiration to migrate.

Although we did not hypothesise on origin-specific effects of the control variables, some cross-national differences are worth mentioning. First, effort to learn the language of the destination country has a stronger impact on migration aspirations in the Netherlands than in Portugal. Because we explicitly measured migration aspirations for short-term and long-term moves, we cannot explain this finding from different assumptions about the length of stay abroad across the two origin countries. Possibly, the finding indicates that the Portuguese are prepared to bear higher costs of migration because of higher expected gains. Second, only among the Portuguese, a small negative age effect is found for short-term moves. Third, only in the Netherlands, individuals cohabiting with their partner are less willing to move abroad than singles. Fourth, past mobility increases the migration aspirations of the Dutch, but not of the Portuguese Master students. Finally, in the Dutch sample, individuals who are less tolerant of uncertainty are less willing to move abroad for maximum 1 year, whereas no significant impact is found for moves longer than 3 years. In contrast, Portuguese respondents with higher scores on the Intolerance of Uncertainty Scale show *higher* migration aspirations. These diverging findings regarding the individual characteristics possibly indicate that migration is perceived fairly different across the two origin contexts. As we saw above, Dutch respondents seem to approach migration more often as a lifestyle choice, which may explain why a short-term stay abroad is more attractive to singles, individuals who already spent time in another country before, and those who are less intolerant of uncertainty (and thus possibly more adventurous). Portuguese Master students on the other hand may consider migration as their best option to secure their financial situation and career in the long run, which potentially explains why particularly younger individuals are willing to migrate. Furthermore, this role of migration to secure a better future may explain the unexpected finding that individuals who are more intolerant of uncertainty in Portugal indicate *higher* migration aspirations, instead of lower, as we would expect from the migration literature. For them, staying in Portugal may appear more risky given their limited opportunities on the Portuguese labour market. Thus, our findings suggest that the types of individuals who are selected into migration differ across origin contexts. Further research is needed to investigate this connection between migration motives and individual characteristics in more detail.

**TABLE 3** Summary of linear regression analysis for variables predicting migration aspirations (random intercept models)

DV: Migration aspirations	Maximum 1 year				More than 3 years			
	Portugal		Netherlands		Portugal		Netherlands	
Vignette characteristics								
Wage (ref Comparable)								
Higher	1.09 <sup>***</sup>	(0.12)	0.43 <sup>***</sup>	(0.08)	1.00 <sup>***</sup>	(0.12)	0.29 <sup>***</sup>	(0.07)
Lower	-0.50 <sup>***</sup>	(0.12)	-0.49 <sup>***</sup>	(0.08)	-0.39 <sup>***</sup>	(0.12)	-0.45 <sup>***</sup>	(0.07)
Job chances (ref Comparable)								
Higher	1.20 <sup>***</sup>	(0.13)	0.51 <sup>***</sup>	(0.09)	1.06 <sup>***</sup>	(0.13)	0.37 <sup>***</sup>	(0.08)
Lower	-0.89 <sup>***</sup>	(0.14)	-0.87 <sup>***</sup>	(0.09)	-0.78 <sup>***</sup>	(0.13)	-0.83 <sup>***</sup>	(0.08)
Level of unemployment benefits (ref Comparable)								
Higher	0.29 <sup>*</sup>	(0.12)	0.20 <sup>*</sup>	(0.08)	0.21	(0.12)	0.19 <sup>*</sup>	(0.07)
Lower	-0.50 <sup>***</sup>	(0.12)	-0.32 <sup>***</sup>	(0.08)	-0.45 <sup>***</sup>	(0.12)	-0.28 <sup>***</sup>	(0.08)
Access to unemployment benefits (ref 6 months)								
Immediately	0.32 <sup>*</sup>	(0.12)	0.25 <sup>**</sup>	(0.08)	0.32 <sup>**</sup>	(0.12)	0.26 <sup>***</sup>	(0.08)
2 years	-0.35 <sup>**</sup>	(0.13)	-0.18 <sup>*</sup>	(0.08)	-0.17	(0.12)	-0.08	(0.08)
Costs of healthcare (ref Comparable)								
Higher	-0.51 <sup>***</sup>	(0.13)	-0.40 <sup>***</sup>	(0.08)	-0.37 <sup>**</sup>	(0.12)	-0.36 <sup>***</sup>	(0.08)
Lower	0.01	(0.13)	-0.03	(0.08)	-0.04	(0.12)	-0.06	(0.08)
Effort to learn the language (ref Moderate)								
High	-0.44 <sup>***</sup>	(0.12)	-0.64 <sup>***</sup>	(0.08)	-0.34 <sup>**</sup>	(0.12)	-0.42 <sup>***</sup>	(0.07)
Low	0.21	(0.12)	0.27 <sup>***</sup>	(0.08)	0.23 <sup>*</sup>	(0.12)	0.27 <sup>***</sup>	(0.07)
Respondents' characteristics								
Male	0.21	(0.23)	0.31	(0.22)	0.24	(0.23)	0.43	(0.22)
Age	-0.09 <sup>*</sup>	(0.04)	0.04	(0.05)	-0.07	(0.04)	0.06	(0.05)
Partnership status (ref Single)								
Partner, not cohabiting	-0.29	(0.23)	-0.16	(0.22)	-0.15	(0.23)	-0.41	(0.23)
Partner, cohabiting	-0.00	(0.41)	-0.59 <sup>*</sup>	(0.29)	0.18	(0.40)	-0.85 <sup>**</sup>	(0.30)
Intolerance of uncertainty	0.39 <sup>*</sup>	(0.16)	-0.34 <sup>*</sup>	(0.16)	0.41 <sup>*</sup>	(0.16)	-0.10	(0.17)
Migration experience	0.37	(0.27)	0.90 <sup>***</sup>	(0.21)	0.16	(0.27)	0.63 <sup>**</sup>	(0.22)
Constant	5.61 <sup>***</sup>	(1.11)	5.69 <sup>***</sup>	(1.32)	4.30 <sup>***</sup>	(1.11)	3.49 <sup>*</sup>	(1.37)
Variance (respondents)	2.03 <sup>***</sup>	(0.24)	2.66 <sup>***</sup>	(0.24)	2.07 <sup>***</sup>	(0.24)	2.92 <sup>***</sup>	(0.26)
Variance (vignettes)	3.54 <sup>***</sup>	(0.14)	1.84 <sup>***</sup>	(0.07)	3.25 <sup>***</sup>	(0.13)	1.64 <sup>***</sup>	(0.06)
N vignettes	1,474		1,858		1,474		1,858	
N respondents	246		310		246		310	
AIC	6,475.29		7,171.22		6,369.54		7,014.09	
BIC	6,638.46		7,342.57		6,533.71		7,185.44	

Note. Standard errors in parentheses.

Abbreviations: AIC, Akaike information criterion; BIC, Bayesian information criterion.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

### 4.2.3 | Length of stay

By including a clear time dimension, our approach enables us to explore the role of the anticipated length of stay in migration aspirations. For both countries, a waiting time of 2 years to access unemployment benefits has a negative impact on aspirations to migrate for maximum 1 year, but not for more than 3 years. It appears that respondents here do not react to the length of the waiting time per

se, but to the fact that they would be unprotected by the welfare state in the destination country over the full length of their stay. Furthermore, the negative impacts of higher costs of healthcare in the destination country and language difficulty are stronger on the aspiration to migrate for maximum 1 year than for more than 3 years. Thus, individuals seem more willing to bear the costs of migration for a long-term stay, possibly because they expect that the benefits will eventually outweigh the costs. Finally, the positive impacts of higher

wages and better job prospects in the destination country than in the origin country are stronger for short-term stays. This could indicate that in the long run, other factors will play a more prominent role in migration aspirations of Master students, such as family policies or distance to the origin country.

#### 4.2.4 | Test of the hypotheses

To test whether the strength of the effects of the vignette dimensions differs significantly between the two origin countries, we estimate a joint model for Portugal and the Netherlands, which includes interaction terms between each vignette dimension and the origin context (Table 4). The findings indicate that migration aspirations are generally lower among our Portuguese respondents, in particular for short-term moves. Positive and significant interaction effects for higher wages and higher job chances indicate that these factors have a stronger impact on the migration aspirations of the Portuguese students. Thus, we find support for our hypothesis that better labour market opportunities in the destination country as compared with the origin country have a stronger positive impact on migration aspirations in Portugal as compared with the Netherlands (*H1*). Furthermore, these results reveal that for the migration aspirations of the Portuguese, it is most important that wages and job chances are *higher* in the country of destination than in Portugal, whereas for the Dutch, the more important factor seems to be that wages and job chances abroad are not *lower* than in the Netherlands. None of the other interaction effects reaches statistical significance in this joined model. Thus, we do not find support for our hypothesis that lower unemployment benefit levels in the destination country as compared with the origin country have a stronger negative impact on migration aspirations in the Netherlands as compared with Portugal (*H2*).

### 5 | ROBUSTNESS CHECK

Although a sample of Master student is rather homogeneous in terms of skill level, their opportunities in the labour market possibly vary between fields of study. In Portugal, Science, Technology, Engineering and Mathematics (STEM) students made up around half of the sample, whereas this proportion was 16% much lower in the Netherlands. To investigate whether the cross-national differences in our main models are actually driven by a composition effect in terms of field of study, we reestimated our models including a dummy variable distinguishing STEM students from students in other disciplines.<sup>4</sup> This robustness check resulted in three additional insights. First, in the Netherlands, STEM students expressed higher migration aspirations than students in other disciplines, whereas for Portugal, the opposite effect was observed. In line with our main findings, this outcome could indicate that STEM students face better job prospects in Portugal and are therefore less likely to be “pushed” abroad by the limited opportunity structure in their origin country than students in other disciplines. Second, as we measured higher migration aspirations in the Dutch

sample as compared with the Portuguese sample, this difference may have even been larger if the two samples were more balanced in terms of field of study. Finally, although we indeed found migration aspirations to vary by field of study, the results of the vignette dimensions remained substantially the same with or without including this dimension.

## 6 | DISCUSSION

In this study, we introduced an experimental design to systematically investigate how opportunity differentials between the country of origin and destination shape the migration aspirations of Master students across two fairly different origin countries: Portugal and the Netherlands. We compared which factors play a role at early stages of the migration decision-making process, in contrast to previous empirical work that mainly focused on actual migration rates (Docquier et al., 2014). Specifically, we tested the expectation that the situation in the origin country influences which factors are most important in shaping migration aspirations. In line with our theoretical reasoning, the findings indicate that migration aspirations should be understood not just from better opportunities in the destination country, but also from what the origin country has to offer. Our study demonstrates how an experimental design can be used as an innovative way to advance our understanding of migration decisions and highlights the importance of taking the situation in the origin country into account when modelling migration.

We started our analysis by investigating which characteristics were considered most important in deciding where to migrate to by respondents in Portugal and the Netherlands. Next, we compared the impact of wages, job opportunities, and welfare benefits on migration aspirations across the two origin contexts. Compared with the Dutch, the Portuguese Master students more frequently mentioned economic indicators as most important in deciding where to migrate to. This finding suggests that, in the context of limited opportunities on the labour market and a lacking welfare state, migration is mainly driven by economic motives. In line with neoclassical migration models, results from our experimental setup confirmed that the potential gains of migration in terms of job opportunities and wages had a stronger impact on migration aspirations among the Portuguese as compared with the Dutch respondents. In deciding where to move to, Dutch respondents were more often interested in culture, climate, and language. For them, international migration appears to serve other goals than purely economic ones, such as leisure, travel, and experience. At the same time, the Dutch respondents expressed higher migration aspirations than the Portuguese. This is an interesting finding, as neoclassical migration models typically consider economic determinants to be the main the drivers of migration. Of course it remains to be seen to what extent the higher migration aspirations of the Dutch students will also result in higher emigration rates.

In contrast to what we expected, lower unemployment benefit levels in the destination country as compared with the origin country did not have a stronger negative impact on migration aspirations in

**TABLE 4** Linear regression analysis for variables predicting migration aspirations, including country-specific effects (random intercept models)

Migration aspiration	Maximum 1 year		More than 3 years	
Vignette characteristics				
Wage (ref Comparable)				
Higher	0.43 <sup>***</sup>	(0.09)	0.29 <sup>**</sup>	(0.09)
Lower	-0.49 <sup>***</sup>	(0.09)	-0.45 <sup>***</sup>	(0.09)
Job chances (ref Comparable)				
Higher	0.49 <sup>***</sup>	(0.10)	0.36 <sup>***</sup>	(0.09)
Lower	-0.90 <sup>***</sup>	(0.10)	-0.85 <sup>***</sup>	(0.10)
Level of unemployment benefits (ref Comparable)				
Higher	0.21 <sup>*</sup>	(0.09)	0.20 <sup>*</sup>	(0.09)
Lower	-0.30 <sup>**</sup>	(0.09)	-0.27 <sup>**</sup>	(0.09)
Access to unemployment Benefits (ref 6 months)				
Immediately	0.25 <sup>**</sup>	(0.09)	0.26 <sup>**</sup>	(0.09)
2 years	-0.18	(0.09)	-0.07	(0.09)
Costs of healthcare (ref Comparable)				
Higher	-0.40 <sup>***</sup>	(0.10)	-0.37 <sup>***</sup>	(0.09)
Lower	-0.05	(0.10)	-0.07	(0.09)
Effort to learn the language (ref Moderate)				
High	-0.65 <sup>***</sup>	(0.09)	-0.43 <sup>***</sup>	(0.09)
Low	0.27 <sup>**</sup>	(0.09)	0.28 <sup>**</sup>	(0.09)
Respondents' characteristics				
Male	0.27	(0.16)	0.35 <sup>*</sup>	(0.16)
Age	-0.02	(0.03)	-0.00	(0.03)
Partnership status (ref Single)				
Partner, not cohabiting	-0.22	(0.16)	-0.29	(0.17)
Partner, cohabiting	-0.40	(0.24)	-0.52 <sup>*</sup>	(0.24)
Intolerance of uncertainty	-0.00	(0.12)	0.14	(0.12)
Migration experience	0.80 <sup>***</sup>	(0.17)	0.57 <sup>***</sup>	(0.17)
Portugal (PT)	-1.25 <sup>***</sup>	(0.26)	-0.87 <sup>***</sup>	(0.25)
Interaction terms vignette characteristics				
PT × wages higher	0.66 <sup>***</sup>	(0.14)	0.71 <sup>***</sup>	(0.13)
PT × wages lower	-0.01	(0.14)	0.05	(0.13)
PT × job chances higher	0.74 <sup>***</sup>	(0.14)	0.72 <sup>***</sup>	(0.14)
PT × job chances lower	0.06	(0.14)	0.10	(0.14)
PT × unemp.ben. higher	0.07	(0.14)	-0.00	(0.13)
PT × unemp.ben. lower	-0.22	(0.14)	-0.20	(0.13)
PT × access unemp.ben. immediately	0.08	(0.14)	0.07	(0.13)
PT × access unemp.ben. 2 years	-0.17	(0.14)	-0.11	(0.14)
PT × costs healthcare higher	-0.10	(0.14)	0.00	(0.14)
PT × costs healthcare lower	0.08	(0.14)	0.04	(0.14)
PT × effort language high	0.23	(0.14)	0.09	(0.13)
PT × effort language low	-0.06	(0.14)	-0.05	(0.13)
Constant	6.43 <sup>***</sup>	(0.86)	4.35 <sup>***</sup>	(0.87)
Variance (Respondents)	2.54 <sup>***</sup>	(0.18)	2.68 <sup>***</sup>	(0.18)
Variance (vignettes)	2.59 <sup>***</sup>	(0.07)	2.35 <sup>***</sup>	(0.06)
N vignettes	3,332		3,332	
N respondents	556		556	

(Continues)

**TABLE 4** (Continued)

Migration aspiration	Maximum 1 year	More than 3 years
AIC	13,789.85	13,537.32
BIC	14,058.75	13,806.22

Note. Standard errors in parentheses.

Abbreviations: AIC, Akaike information criterion; BIC, Bayesian information criterion.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

the Netherlands as compared with Portugal. We can explain this outcome as our sample of Master students generally considered welfare provision in the destination country to be less relevant for their migration decisions. Most people finish their Master in their 20s or early 30s, prior to entering a professional career or starting a family. Connected to this life stage, it can be expected that labour market-related factors will be central to the migration aspirations of our sample, whereas welfare provisions are of less concern. Thus, which factors shape the aspiration to migrate not only depends on macro-level circumstances in the origin country, but also on the social position of the individual (Hadler, 2006).

In our study, unemployment benefit levels appeared to shape migration aspirations of Portuguese and Dutch Master students alike, in the sense that both groups were less willing to move to destinations where unemployment benefits are lower than in their origin country. This finding fits with the theoretical reasoning of frameworks like NELM and the prospect theory that individuals are more concerned about losing the level of security they already have in the origin country than about what they might gain through migration. Nevertheless, the implications of this finding may be rather different for the two origin contexts. After all, across Europe, the Netherlands has one of the highest unemployment benefit levels, whereas the benefit level in Portugal is among the lowest (Bruzelius et al., 2017). Based on the criterion that welfare provisions should be at least as high as in the origin country, an individual coming from Portugal will have much more options for migration than an individual coming from the Netherlands. In this sense, our findings may still indicate a weaker retaining impact of the welfare state in countries with lower benefit levels.

Although a factorial survey approach offers some important ways to advance migration research, we need to pay attention to the limitations of our approach as well. To start with, migration decisions are a complex, multifaceted choice (Williams, Jephcote, Janta, & Li, 2018), whereas experiments are designed to be relatively simple to enhance control and examine targeted aspects of the subject under study (Baláz & Williams, 2017; Friedman & Sunder, 1994). In our design, we for instance described hypothetical destination countries by six dimensions, which is by definition a reduction of a more complex reality. Furthermore, the migration aspirations expressed by our respondents are sensitive to the phrasing and timing of the survey. For these reasons, it remains uncertain to what extent respondents' migration aspirations will translate into actual behaviour. Although these issues are to some extent inherent in experimental methods, future work could elaborate on our findings by means of a two-step design (for an

example, see Baláz et al., 2016). In such a design, respondents evaluate each vignette twice, whereby the country name is revealed only the second time. This way, unobserved variance associated with specific destination countries can be measured by the researcher, and migration aspirations can be compared with actual migration rates.

As another limitation, our study focuses on a sample of Master students, which is a homogenous but also highly selective target group in terms of life stage and skill level. Possibly, different determinants are central to the migration aspirations of people in other social positions, such as lower educated individuals, older individuals, or individuals with children. Further research is therefore needed to investigate whether and how the impact of opportunities in the destination country varies between origin countries for those groups. Previous studies already showed that Master students are relatively mobile in comparison with other groups in society (Van Mol, 2016; Williams et al., 2018). By offering a way to include people who do *not* desire to migrate, a factorial survey holds great promise to investigate the factors shaping the migration aspirations of less mobile groups.

To conclude, our findings indicate that circumstances in the origin country shape which characteristics of the destination country are most important to migration aspirations. Master students from an economically disadvantaged country like Portugal more often considered migration as a way to improve their financial situation, whereas those originating from an affluent country like the Netherlands more often seemed to consider migration as a lifestyle choice. In effect, the impacts of economic opportunities in the destination country on the willingness to migrate were found to vary between origin countries. A relevant next step for future research on migration decision-making would be to investigate whether these migration motives also hold different potential for translating migration aspirations into concrete plans and eventually actual behaviour across different origin countries. Furthermore, our findings suggest that circumstances in the origin country play a role in determining whether individuals perceive migration as either an adventure or a way to overcome uncertainty. Future research could investigate this explanation further by also comparing the impact of the personality trait of sensation seeking (e.g., Remhof et al., 2014) on migration aspirations across different origin contexts. Finally, our findings on the importance of the origin context highlight the need for future research to understand migration aspirations not just from opportunities in the destination country, but also from potential losses in the country of origin. As the willingness to move is a necessary precondition for any form of voluntary migration (Kley & Mulder, 2010), this empirical finding on migration aspirations has relevance for the wider literature on migration decisions.

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## CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors.

## ORCID

Petra Wieke de Jong  <https://orcid.org/0000-0003-3423-8415>

María Lucinda Fonseca  <https://orcid.org/0000-0002-8867-8910>

## ENDNOTES

- <sup>1</sup> In Portugal: University of Lisbon, New University of Lisbon, Polytechnic Institute of Lisbon, and ISCTE—University Institute of Lisbon. In the Netherlands: Erasmus University Rotterdam, Maastricht University, Radboud University, Technical University Delft, Tilburg University, University of Amsterdam (UvA), University of Groningen, Utrecht University, and Vrije Universiteit Amsterdam (VU)
- <sup>2</sup> In the search algorithm, we specified the following interaction terms to be tested: WageXUnemployment benefit level; WageXUnemployment benefit access; WageXCOSTS of healthcare; Job ChanceXUnemployment benefit level; Job ChanceXUnemployment benefit access; and Unemployment benefit levelXUnemployment benefit access. Although a higher D-efficiency score could be obtained by drawing a larger vignette sample, for practical reasons, a vignette sample of 54 vignettes provided the most optimal solution.
- <sup>3</sup> Coefficients of the control variables regarding the design of the questionnaire are not presented in the tables below, but are available upon request. The results are comparable for models with and without these control variables.
- <sup>4</sup> Results of these models are available upon request.

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