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Where is the Destination? Understanding the Determinants of International Students' Destination Choices upon Graduation in Ireland

This study investigates the extent to which human capital and social capital may influence the likelihood of staying abroad or returning home upon graduation for international students in Ireland. The number of students from developing countries who migrate to pursue a tertiary degree in developed countries is notably high in recent years. Their choices of staying in the west or returning home upon graduation have strong impacts both on their personal career chances as well as on the economic prospects of both host and home countries. Instead of surveying among on-campus students, a survey was carried out during October 2017 to February 2018 among international alumni of Irish universities in order to collect information about their first-job location upon graduation. The main findings include: (1) human capital, especially degree major and language ability, is positively associated with the likelihood of staying abroad, (2) bridging social capital, especially bridging ties embedded with resources, is positively associated with the likelihood of staying abroad, while bonding social capital has no significant effect.

Keywords: international students; migration choices; human capital; social capital, Ireland.

1. Background

International students, a population who travel to a country different from their own for the purpose of tertiary study, comprise an important but rather under-explored element in the global migration literature (Findlay, 2011). International students distance themselves from the traditional stigma of 'migrants as a problem' and self-identify as 'international' or 'visiting' scholars and are referred to as such by their host institutions (King and Ruiz-Gelices, 2003). Nevertheless, by any conventional definition of international migration—movement from one country to another for a significant period of time, such as a year or more—students are migrants.

The growing internationalisation of education and economics encourages students to be more mobile to develop skills that are considered essential to being competitive in an increasingly global labour market for highly skilled individuals. A western university degree is expected to generate higher economic and social returns following international students' return home, giving them a more advantageous starting position in the graduates labour market relative to locally educated ones. In 2013, there were more than 4.5 million tertiary students enrolled in a country in which they were not citizens (OECD, 2013). Findlay (2011) has argued that while mainly focusing on the choices of student migrants, the literature has ignored the supply-side practices of those seeking to recruit talented young people from other countries into western universities. He noted that from the supply side, higher education institutions increasingly see international education as an export activity that yields economic returns and market their tertiary education programmes internationally. Kauppinen (2015) went even further by conceptualizing the integration process between higher education and the knowledge economy as *academic capitalism*.

The trend for students to study abroad, especially from the developing to the developed countries, looks set to continue. Demographic, labour and market changes in the last few decades, combined with a transition to the knowledge economy, creates substantial demand for highly-skilled workers in developed countries. Since policies for attracting highly-skilled foreign workers are not always effective due to factors such as long adjustment periods to new environment, possible skill gaps between home and host country (Gingras and Roy, 2000; Reitz, 2001) as well as foreign credentials nonrecognition (Bauder, 2003), host-country-trained international students have come into the spotlight as a significant source of skilled labour for host societies. Compared with newly arrived foreign workers, host-country-trained students obtain education credentials from host country universities, have adjusted themselves to host societies during their study here and are more familiar with host countries' labour market. On the other hand, students themselves migrate not only to building up knowledge and skills, but also with a desire to stay and work in the host country upon graduation. The retention of talented students may contribute significantly to the host country's economy while, on the other hand, may result in concerns about *brain drain* for home countries.

Indian and Chinese Ph.D. holders forming the scientific backbone of Silicon Valley and other high-tech production areas is an example of this kind (Wong, 2006).

The decision of international students to stay or return upon graduation has received significantly less scholarly attention than their initial migration. Most studies on international student migration focus on the determinants of their choices of study location (Naidoo, 2007; Gonzalez, Mesanza and Mariel, 2011; Beine, Bertoli and Fernández-Huertas Moraga, 2013). Very few studies provide actual return rates, perhaps owing to the challenge of obtaining relevant data; instead, most studies report students' *intentions* to stay or return (Baruch, Budhwar and Khatri, 2006; Hazen and Alberts, 2006; Soon, 2012). Although it is easier to collect intentional data among university students rather than locating graduates for observed behaviour, the experience of migration and of living in another country often leads to modification of the original plans. So, students' intentions at the time of study are poor predictors of actual migratory behaviour upon graduation (Castles, 2010). Surveying among university alumni, this study aims at unveiling the factors influencing international students' destination choice upon graduation based on observed behaviour, that is *where they are now* or *where they were* instead of *where they want or plan to be.*

Ireland is selected as a case study to highlight some of the characteristics of western education systems. Ireland is the host country of some 23,127 tertiary foreign students (Higher Education Authority, 2017). According to a report from Education in Ireland (2012), 20% of all international students were enrolled as full-time PhD students and 49% of them were from non-EU countries. Advantages such as being an English-speaking country, highly-ranked universities and successful global promotion have led Ireland to become an emerging player in the international education market. Especially after the UK's referendum of withdrawal from European Union in 2016, the number of international applicants for Irish universities has surged in recent years. For example, applications from non-EU student for University College Cork were up by 40 per cent in 2017 (The Irish Times, 2017). While most existing studies on international student migration primarily focus on the US, the UK and continental European countries, the case of Ireland seems to be ignored. Till now, no studies can be found on international students' migration behaviour in Ireland. Thus, this paper aims to fill the literature gap by

analysing the determinants influencing Irish university international students' destination choice upon graduation.

2. Literature Review

Four studies are particularly relevant to the aim of this paper. Soon (2012) examined the factors influencing international students' intention of where to go after graduation in New Zealand. Surveying among on-campus students, Soon found initial intention to return home country and support of the students' families to exhibit strong impacts on where students intend to go upon graduation. Degree and major were also important factor influencing their future plans, since doctoral students and students from the health sciences were found to be less likely to want to return home. Interestingly, contradicting with neoclassical theory which emphasizes the monetary return as the key migration motivation (Sjaastad, 1962), the perception of expected future income was found to have no significant impact on students' future destination country choices. One drawback of Soon's study is her decision to use a four-outcome multinomial logit regression technique to model students' future destination plan: the rationale for regrouping and constructing the four destination outcomes were unclear and the results are difficult to interpret. For example, she categorized Australia and the US into one outcome, but one would imagine that given factors such as geographical distance and differing policy attitudes towards immigrant workers, Australia and the US should be two distinct outcomes.

Baruch and his colleagues (2006) examined the factors influencing international students' inclination to stay in the host countries or return home on a sample of 949 UK and US students. Also surveying among on-campus masters students, they found the adjustment process, defined as the acculturation process when international students first arrived in host countries, as the most significant predictor of future destination choice. They believe that a smooth adjustment process to the host country and the university, such as feeling welcome and not suffering from cultural shocks, would generate positive attitudes towards the host country and its people, an essential factor in an emigration decision. Those students who benefit from a smooth adjustment to the new country may be happy to stay in the environment where they felt welcomed. Also, they found strong ties with family

members increase the likelihood of returning, while a positive perception of the host country's economy lead to a desire to stay. However, the study suffers from the lack of an overall theoretical framework guiding the choice of independent variables.

Hazen and Alberts (2006) conducted a survey of 185 international students in the University of Minnesota—Twin Cities to investigate their intention to stay in the US or return home after graduation. Similar to Baruch et al. (2006), the authors concluded that economic and professional factors typically dominate among incentives to stay in the US, while personal and societal factors tend to draw the students back to their home countries. This reflects the classical situation where economic and human capital often *push* migrants to go West while their social capital from home country tends to *pull* them back. Using a dataset of science and engineering graduates from 12 European countries, De Grip, Fouarge and Sauermann (2009) analysed the determinants of students' labour migration upon graduation. They found not only that wage differences drive the migration decision, but also that differences in labour market opportunities, past migration experience and international student exchange are strong predictors of future migration. However, the data they used primarily covers student migration within the EU, the context and rationale of which is rather different than the aim of this study. Also, their study is somewhat dated because the dataset they used were collected in the 1990s. Immigration policy in relation to international students has seen a big shift in the 21st century. For example, the UK case where the Post Study Work visa scheme introduced in 2004 which encourages international students to remain and work in the UK without a working permit was eventually closed in 2012, not to mention the impact of Brexit on international (and European) students' intentions of studying or staying in the UK. Thus, up-to-date datasets need to be used to understand this dynamic phenomenon.

Several other studies were also found to be of relevance to this study. Guth and Gill (2008) explored the professional motivations of Polish and Bulgarian doctoral scientists who went to western European countries. Via a qualitative approach, they concluded that mobility among Polish and Bulgarian scientists was not economically driven in the traditional sense of moving to earn more, rather it was other reasons, such as science expenditure, available positions, prestige of institutions in host country as well as under-investment in home countries' research

and development (R&D) that motivated this group of scientists to emigrate. Balaz and Williams (2004) studied Slovakian students' return migration from the UK. Under the framework of human capital acquisition, their finding highlighted the value attached to language competence during years abroad, in particular, but also learning, attitudinal and interpersonal competences, as well as networking.

Parey and Waldinger (2011) investigated the effect of studying abroad on international labour market mobility later in life among university graduates, using Erasmus data. They found that studying abroad increases an individual's probability of working in a foreign country by about 15 to 20 percentage points. Similarly, Oosterbeek and Webbink (2011) used econometric techniques to test to what extent studying abroad increases Dutch students' propensity to live abroad later, also using Erasmus data. Their finding reveals that award of a scholarship from the programme increases the probability to study abroad by 25-30 percentage points and the number of months spent studying abroad by 5-8 months. Constant and D'Agosto (2008) examined the determinants that affect the country choice of the 'brainy' Italian scientists and researchers who have at least a bachelor degree from Italy and live abroad. They primarily focused on differences between different majors and disciplines.

We summarise two main gaps found in the literature. Firstly, most studies mentioned above (except for Constant and D'Agosto, 2008 and De Grip, Fouarge and Sauermann, 2009) used survey data that were conducted among current university students, so the findings related to intentions instead of observed behaviour. The key dependent variables in these studies are *where you plan to go after graduation* instead of *where you are/were upon graduation*. Although students' migration intentions are useful indicators of future migration decisions and can to some extent provide insights into the factors students take into account in decision-making, the experience of migration and of living in another country often leads to modification of the original plans. So students' intentions at the time of study are poor predictors of actual behaviour upon graduation. Students who initially planed to stay upon graduation may fail to find a job in the host country and eventually return home.

Secondly, studies from economics perspectives (e.g. De Grip et al., 2010 and Oosterbeek and Webbink, 2011) tend to focus primarily on monetary and human capital determinants and ignore the important network effects influencing people's

migration movement, which sociologists have been emphasizing since the 1990s (Massey et al., 1999). Although some studies mentioned above did consider social ties as an important factor influencing students' destination choices upon graduation (e.g. Soon, 2012), the exact mechanism through which social networks influence students' migration decision-making is not fully understood. The location of family members is often mentioned as the network effect *pulling* students to return home in some of the above-mentioned studies, however, other types of network effect, such as friends networks were largely ignored. Indeed, individual's social capital is not just confined within the family: especially in a migration context, who you know outside of your family may be more important. It is easy to imagine that a student who has many host country friends and strong academic relations in a host country may choose to stay in the host country since the instrumental value of social capital obtained in the host country exceeds the emotional value of social capital from family back home.

Thus, in an attempt to address the literature gaps, this study differs from previous studies in two aspects. Firstly, in order to avoid divergence between intention and reality, a survey was conducted among university recent graduates. By collecting data from recent graduates instead of current students, their actual locations upon graduation were collected which is used as the key dependent variable in the following analysis. Secondly, detailed social network data was collected in order to better understand the network effect of migration. Individual student's social capital was measured in three types of networks: friends network, family network and academic network. Two forms of social capital—bonding social capital and bridging social capital—were distinguished so as to understand the effects of different forms of social capital on destination choice.

3. Theories and Hypotheses

Human capital theory and social capital theory were drawn upon to help unveil the factors influencing international students' destination choices upon graduation in this study.

3.1 Human Capital

Human capital, popularized by economists such as Schultz (1961) and Becker (1964), is broadly defined as the stock of knowledge, habits, social and personality

attributes, including creativity, embodied in the ability to perform labour so as to produce economic value. The potential to Yield future income increase is regarded as a major difference between investment in human capital and expenditures for pure consumption. Sjaastad (1962) first introduced the human capital concept into migration by arguing that migration is an equilibrating mechanism for relocating resources and increasing the productivity of human resources in a changing economy. This stream of literature believes that people migrate to the place where their human capital can generate the most return (Sjaastad, 1962; Todaro, 1969, 1976; Todaro and Maruszko, 1987). Highly skilled and educated migration is strongly shaped by human capital since migrants often possess higher human capital than other types of migrants, thus having a higher expectation of turns on their human capital investment.

In the case of international students, following the assumption of human capital theory that people migrate to where their human capital can generate the most return, we would expect that most students would have stayed and worked in western host countries since jobs in host countries are generally much better-paid than those in home developing countries. However, this is not the case. The OECD, for example, showed less than 25% of international students stayed in host OECD countries upon graduation (OECD, 2013). Studies have shown that language proficiency, host country work experience, skill familiarity are some main factors hindering international students' employment in host country (Dustmann and Fabbri, 2003; Mason, Williams and Cranmer, 2009). Thus, it is expected that there should be a minimum requirement of human capital that has to be reached to secure employment if they wish to stay and work in western host countries. And for those who cannot find a job upon graduation in host country, they often end up returning home.

In this study, individual's human capital is measured in three dimensions—education, language ability and experiences—and it is hypothesized that:

Hypothesis 1: Possession of more human capital increases the likelihood of staying in the West.

3.2 Social Capital

Whereas economic capital is in people's bank accounts and human capital is inside their heads, social capital, intangible as it is, inheres in the structure of people's

relationships. The notion of social capital, introduced in the recent sociological literature in French by Bourdieu (1980, 1986) and developed in English by Burt (1984), Coleman (1988), Lin (1999a, 1999b) etc., is based on the rather simple and straightforward premise: investment in social relations generates expected returns. Existing theoretical debates conceptualize social capital in two different perspectives. One views it as a pool of resources, which may be beneficial for the individual's goal attainment (Bourdieu, 1980; Lin, 1999; Flap and Volker, 2004), while the other one discusses social capital as collectively produced and benefiting the community (Coleman, 1988; Putnam, 1995). In this study, we do not analyse the social capital effects of the 'ethnic community' as such, but rather focus on its influences on individuals. Following Lin (1994b), social capital is defined in this study as resources embedded in a social structure which are accessed and/or mobilized in purposive actions.

To address the effects of social capital in different types of network, an individual student's network is divided into three different types: friends network, family and relatives network, and university network. In friend networks, the distinction between bonding social capital and bridging social capital is emphasized in particular. Drawing from Putnam (2000), loosely defined, bonding social capital refers to within-group connections, while bridging social capital refers to between-group connections. In migration literature, bonding social capital often refers to the available resources embedded in co-ethnic networks, such as friends from the same country or family networks, while bridging social capital implies network resources in ties with native people or other immigrants not from one's national/ethnic background (Putnam 2000; Nannestad et al., 2008; Nannestad, Lind Haase Svendsen and Tinggaard Svendsen, 2008; Kanas, A., Van Tubergen, F. and Van der Lippe, T., 2009; Lancee 2010). The advantage of bridging ties is that useful non-repetitive information comes into reach (Putnam, 2000). It is well established in the literature that for immigrants, contacts outside of one's co-national/-ethnic networks are important cross-cutting ties and can result in better labour market outcomes (i.e. the likelihood to be employed and higher income) (Portes 1998; Heath and Yu 2005; Haug 2008; Lancee, 2010).

Although the concepts of bonding and bridging social capital are anything but new, there are no studies to be found on their impacts on students' migration

decision-making yet. Drawing from Putnam's theory (2000), it is expected that international students who obtain more bridging social capital can access more diverse information and resources through intercultural networks which may help them stay in the host country. Having more bridging social capital may also imply better language ability to communicate with natives and other international students and better cultural integration, which also helps students settle in the host country. On the other hand, obtaining more bonding social capital indicates strong relations with co-national/-ethnic friends. Bonding networks contain more homogeneous and redundant information which are not as beneficial in terms of job search compared with intercultural networks (Porters, 1998; Lancee, 2010). Students having more bonding social capital may also imply weak language ability for intercultural communication and poor integration in host society. Thus, it is proposed that:

Hypothesis 2a: Possessing more bonding social capital increases the likelihood to return home while possessing more bridging social capital increases the likelihood to stay.

As for family networks, in international student migration literature, studies have shown the strong *pull effect* of family members pulling students back to home country (Hazen and Alberts, 2006; Soon, 2012). The relationship between students and academic advisors, however, has never been taken into consideration in existing literature. Academic supervisors and university faculties can provide host-country-specific information and resources which may help international students to gain employment in the host country. Thus, a close relationship with academic supervisors and university faculties may increase the likelihood of staying. Thus, the following hypotheses relating family and academic networks are proposed:

Hypothesis 2b: Strong family social capital from the home country increases the likelihood to return home.

Hypothesis 2c: Close relationships with supervisors and university staff increases the likelihood to stay in West.

4. Research Design

4. 1 Sample and Data

Since there are no appropriate datasets available that suit the purpose and scope of this study, an original micro-level dataset was constructed by using a web-based questionnaire survey on a sample of Irish universities' international alumni. The data collection extended for five months, from Oct 2017 to Feb 2018. The target population for this study are all non-EEA/Swiss Confederation alumni who graduated and received any levels of third-level degrees from all the seven Irish universities[1] during the years of 2014 to 2016 (3 years graduates). Students from EEA countries, though technically are immigrants considering their action of moving between different borders, are excluded from this study, since the current EU regulation allow them to move freely inside the European community and the rationale behind their movement is fundamentally different from international students' movement (Guruz, 2011). As is mentioned above, alumni are targeted instead of current students because people's intention of migration and future reality differ significantly. The time period of the three years prior to the survey is chosen since earlier graduates may find it difficult to recall details of their human capital and social capital items when answering the questionnaire.

Drawing from the datasets provided by the Higher Education Authority (2017), there were in total 10,706 non-EEA students graduated from Irish universities during 2014-2016. The sampling frame used here is the email lists of 2014-2016 international alumni maintained by the alumni office of all seven Irish universities. In order to reach the target population, the alumni offices of all seven universities in Ireland were contacted. After numerous rounds of negotiation, only University College Dublin and Dublin City University distributed the survey among their international alumni. To improve the sample size, the snowball sampling method was also used to increase the sample size by asking questionnaire participants to forward the survey link to those who they know that are qualified to answer it. After excluding duplicate and questionable responses, the final usable sample size is 325, among which 109 responses are from DCU (33.3%), 178 from UCD (54.4%), and the rest 40 responses from MU (1.2%), UL (6.4%) and TCD (4.6%).

4.2 Constructing Variables

[1] There are seven universities in Ireland, namely, Dublin City University, Maynooth University, National University of Ireland Galway, Trinity College Dublin, University College Cork, University College Dublin and University of Limerick.

4.2.1 Dependent Variable

From the collected data, the dependent variable was constructed: where is/was your first job located upon graduation from your host Irish university. Four options were provided: Ireland, other EEA countries except Ireland, home country and others. In the dataset, 168 (52%) international graduates' first jobs are/were located in Ireland, 14 (4%) located in other EEA countries except Ireland, 121 (37%) of them returned to home country to work, and 8 (3%) went to other countries including USA, Singapore and Canada. 14 (4%) graduates have been unemployed since graduation due to parenting, pregnancy or disability. Table 1 presents the descriptive statistics for the key dependent variable *first job upon graduation* with cross-tabulation of students' area of origin.

Because the dependent variable is a four-outcome variable, ideally a multinomial logit model should be applied in the regression analysis. However, this solution is less attractive, as it leads to too few cases to reliably estimate parameters such as for the "other European countries except Ireland" category. Since this study focuses primarily on the difference between those who returned home and those who stayed abroad, we decided to re-categorize the four outcomes into two: first job in home country versus the rest. By constructing this binary outcome variable, it helps the readers gain a clearer view of the comparison between the two categories mentioned above. Thus, for this new binary dependent variable, 121 (37%) international graduates in the sample returned home to work upon graduation while 190 (58%) stayed abroad for their first job.

4.2.2 Independent Variables

The key independent variables in this study are international graduates' human capital and social capital. It is important to remember the items measuring human and social capital illustrated below are time-specific. They are measuring the human and social capital graduates possessed at the time of graduation, not the time of answering the survey.

Table 1.
Summary Statistics of the Dependent Variable: Location of First Job after Graduation

	Home country	Ireland	Europe except Ireland	Other Places
Chinese	63	27	5	2
Other Asians except Chinese	36	60	1	0
Latin American	3	20	0	0
African	19	35	4	2
North American, Oceanian, European non-EEA	0	26	4	4
Total Percentage	39%	54%	4%	3%

Human capital variables

In this study, international graduates' human capital was measured in three dimensions: education, language ability and experiences. Education was measured by asking graduate's degree, major and which university they graduated from. In the analysis, they were first transformed into dummies. Degree was dichotomized into PhD versus master's/bachelor degree; major was distinguished between science, technology, engineering and mathematics (STEM) versus the rest; and university was divided into whether the university is based in Dublin or not. The rationale for the latter is that the dynamic and vibrant labour market in the Irish capital city makes it advantageous for Dublin-based graduates to seek employment there. Language ability was measured by a self-evaluation scale. Participants were asked to evaluate their listening, speaking, writing and reading ability (each on a 5-point scale) and the self-assessed English ability is constructed by adding the four elements together. Experience includes work experience and internship experience.

Social Capital Variables

Social capital was measured in three different types of networks: friends network, family network and university/academic network. For the friends networks, three sets of questions are included to measure bonding and bridging social capital. The scale for bonding social capital consists of five items that measure the strength of co-national friendship ties by the frequency of giving or receiving help, the frequency of contact and personal preferences. Moreover, two five-item scales for measuring bridging social capital were provided. The first one measures one's social

capital with local Irish friends and the second one measures one's social capital with friends who were neither co-national nor Irish (for convenience, they are referred to as *other internationals* henceforth). Although international students' network ties with Irish people and with other international friends are both bridging, the rationale to separate Irish from other internationals is to treat the Irish relationships as advantaged local network resources who may provide host-country-specific information that is difficult to access as foreigners. This study does not distinguish between friends met on campus and friends from outside of universities. It is possible that friends from outside of universities may function as bridges reaching more local and diverse information than friends who are also university students. But concerning the length of the questionnaire, we didn't design separate questions to measure these two types of relationships. Future studies can distinguish between these two types of friends to see if there is an effect difference on the likelihood of staying or returning. Also, more advanced techniques to measure social capital, such as name generator (Burt, 1984) or position generator (Lin, 1999b) can be tried in future studies.

For the family network, participants were asked about their relationship status[2], partner's nationality, partner's location, whether had children and where they resided, as well as where their parents resided during their study in Ireland. However, there are lots of missing values for partner's nationality, location of partner and location of children variables since those who didn't have a partner or children by the time of graduation skipped the questions. Due to the rule of listwise deletion of missing data, directly adding these three variables would result very small sample size (72 observations). Thus, in order to understand the effect of family social capital on graduates' migration choices and to keep the sample size as large as possible, a new variable named *family social capital from home country* was constructed. This variable adds up the four dummy variables, which are partner's nationality, location of partner, location of children and location of parents[3] and it represents the pull effect of family from home country. It ranges from zero to four.

[2] Instead of asking marital status, the questionnaire asked if one was partnered or not at the time of graduation, and especially in parenthesis, it was stated that boyfriend or girlfriend is included. It is believed that even though not married, a stable romantic relationship can influence one's destination choice upon graduation.

[3] In terms of coding, partner's nationality: 1 co-national, 0 non-conational; location of partner/children/parents: 1 home country, 0 abroad.

Zero means no pull effect from home country while four means the strongest pull effect from home (for example, someone scoring four means his/her partner is co-national and his/her partner, children and parents were all living in home country during his/her study in Ireland). Creating this variable not only helps to understand the pull effect of family from home, it also replaces the missing values with zero so as to keep the sample size as large as possible.

As for the academic network, a five-item scale was used to measure students' social capital with academic supervisors and university staff by the degree of closeness, frequency of receiving help and job market information. These questions were only answered by doctoral graduates since bachelor and master students may not have a specific supervisor throughout their study in university.

Control Variables

A number of control variables are also included: age, gender, family background (highest degree achieved by parents), original career plan upon graduation before coming to Ireland, number of years living in Ireland (Europe) by the time of graduation and area of origin. In line with previous studies, females are expected to be more likely to return home than males and older students are more likely to return home than the youngers (Hazen and Alberts, 2006; Soon, 2012). Parents' highest education degree is used as a proxy of students' family background. It is expected that students from a less-privileged family background are more likely to stay in Ireland/Europe due to the high income benefit. Graduates with an original plan of returning home upon graduation are more likely to return home than those who wish to stay or those who didn't have clear plans. Numbers of years living in host country may also influence students' destination choice. It is expected that the longer students live in Ireland, the more likely they would stay and work in the West upon graduation. Nationality is re-categorized into five categories: Chinese, other Asian except Chinese, Latin American, African and others (which includes North American, Oceanian and non-EEA European). For these six control variables, gender, parents' highest education and original career plan are made into dummies while age, years spent in Ireland and nationality are continuous/categorical. The summary statistics for all explanatory variables are shown in Table 2.

Table 2.
Summary Statistics for All Explanatory Variables

Explanatory Variables	Mean	Range	Std Dev.
Human Capital			
Degree (PhD)	0.38	0-1	0.49
Major (STEM)	0.36	0-1	0.48
University (Dublin-based)	0.59	0-1	0.49
English ability	14.55	5-20	4.22
Work experience (years)	1.09	0-11	2.00
Internships	0.49	0-3	0.69
Social Capital			
Bonding social capital with co-nationals	15.87	5-25	6.53
Bridging social capital with Irish	10.86	5-25	4.80
Bridging social capital with other internationals	16.42	5-25	5.99
Family social capital from home country	1.49	0-4	0.81
Social capital with supervisor and university staff	5.67	0-25	8.19
Control Variables			
Gender (Male)	0.47	0-1	0.50
Age	26.53	20-37	4.48
Original plan of not going back	0.56	0-1	0.50
Parents' highest education (Tertiary)	0.40	0-1	0.50
Years in Ireland	2.73	1-9	1.79
Origin	Observation	Percentage	
Chinese	101	0.31	
Other Asian except Chinese	103	0.32	
Latin American	23	0.07	
African	65	0.20	
Others	35	0.11	

5. Findings and Results

In this section, three models are presented. In all three models, the likelihood of returning home or staying abroad is predicted by the human capital, social capital and control variables. However, in Table 3, we distinguish among bonding social capital with co-nationals, bridging social capital with Irish and bridging social capital with other internationals. In Table 5 Model 1, a new variable, bridging social capital was constructed by summing up bridging social capital with Irish and bridging social capital with other internationals. In Table 5 Model 2, bonding and bridging social capital are each broken down into two components: numbers of ties, and resources and closeness. With respect to multicollinearity, since questions measuring social capital with supervisor and university staff were only answered by PhD students since undergraduate and master's degree students often do not have a specific supervisor during their study in university, this variable is highly

correlated with the degree variable (pairwise correlation 0.85). Thus, in the later analysis, the social capital with supervisor and university staff variable is excluded. To account for possible bias in the standard errors due to heteroskedasticity, Huber-White robust estimates of the standard errors are reported.

Bonding vs Irish Bridging vs Other International Bridging

In Table 3, the likelihood of returning home or staying abroad is predicted by bonding social capital with co-nationals, bridging social capital with Irish, bridging social capital with other internationals as well as the rest human, social and control variables.

Table 3
Logistic Regression Predicting the Likelihood of Staying vs Returning
Bonding vs Irish Bridging vs International Bridging

	Odds Ratio	SE
Degree		
Bachelor	Ref.	
Master's	0.40	0.21
PhD	0.81	0.55
Major (STEM)	3.81*	2.58
University (Dublin-based)	1.81	1.64
English ability	1.21*	0.10
Work experience	1.14	0.19
Internship experience	0.59	0.18
Bonding social capital with co-nationals	0.89*	0.04
Bridging social capital with Irish	1.05	0.07
Bridging social capital with other internationals	1.31***	0.47
Family social capital from home country	1.34	0.25
Gender (Male)	0.63	0.10
Age	0.98	0.10
Original plan of not going back	3.48**	1.81
Parents' highest education (Tertiary or above)	1.15	0.52
Years in Ireland	0.78	0.13
Origin		
Chinese	Ref	
Other Asian except Chinese	1.18	0.65
Latin American	1.76	1.48
African	0.08**	0.06
Others	-	-
Constant	0.002	
Log-likelihood	–87.22	
Observation	270	
Pseudo R^2	0.52	

Note: *p<0.05, **<0.01, ***<0.001 (two-tailed test). Odds ratios and robust standard error are reported.

In Table 3, for human capital items, both majoring in STEM and English ability are associated with a higher likelihood of staying abroad upon graduation. The odds of

staying abroad upon graduation is 3.8 times higher for STEM graduates compared to non-STEM ones. For each additional point increase in English ability, the odds of staying abroad increase by a factor of 1.2, holding all other variables constant

For social capital items, bonding social capital with co-nationals and bridging social capital with other internationals showed significant effects on students' destination choices. Possessing more bonding social capital increases the likelihood of returning to home country while possessing more bridging social capital with other internationals increases the likelihood to stay and work in the West upon graduation. This supports Putnam's theory where bonding social capital, though providing high levels of solidarity and enforceable trust, does not provide one with new and non-repetitive information that is useful in settling down or finding a job in a new unfamiliar environment like bridging social capital. It was expected that bridging social capital with Irish could provide international students with more host-country-specific information which would help them find employment or settle in Ireland upon graduation. However, bridging social capital with Irish, though the coefficient has the sign expected from the theory, didn't show any significant effect. This may be due to a low variance of this variable measuring contact with Irish nationals. . As is shown in Table 2, the bridging social capital with Irish variable has a much lower mean and standard deviation than the other two social capital variables. Furthermore, no significant effect was found for family social capital from home country on the likelihood of staying or returning. It is understandable that at the early stage of one's career, the pull effect of family from home may not affect the location of their first job choices too much.

With respect to the controls, their coefficients correspond with findings from previous literature. Age is negatively associated with the likelihood of staying abroad. The older one is, the more likely he/she returns to home country upon graduation. Furthermore, it is found that for those whose original plan was to return home, the odds of returning home are 3.5 times larger than those who did not plan to return or did not have a clear plan. This result is consistent with Soon (2012), Hazen and Alberts' (2006) and Li, Findlay, Jowett and Skeldon's (1996), who also found association between age and original plans in terms of (intended) destination choices. African students are found to be more likely to return than the reference group: Chinese students. There are no significant effects observed for gender, years

in Ireland and parents' educational level. Although not significant, it's interesting to observe the negative association between years living in Ireland upon graduation and the odds of staying in Ireland/Europe. This is in contrast to Soon (2012) which found a positive association between years staying in New Zealand and intention of staying in New Zealand upon graduation. This may be because students who stayed in Ireland for a short time still may be inclined to stay in order to experience Ireland/Europe more. While for those who stayed longer might have developed a feeling of foreignness and homesickness during their study which leads them to return home upon graduation.

Bonding vs Bridging

In Table 5, two models are presented. In the first model, the previous two bridging social capital variables in Table 2 (bridging social capital with Irish and with other internationals) are replaced by a new variable named *bridging social capital*, which was constructed by summing up bridging with Irish and bridging with other internationals. In this way, the effect of bonding versus bridging social capital can be better compared. In the second model, drawing from Portes' comments (1998) where social capital can be decomposable into two elements under Bourdieu's definition: first is the social relationship itself that allows individuals to claim access to resources possessed by their associates, and second, the amount and quality of those resources, bonding and bridging social capital are furthermore broken down into two elements: numbers of ties versus resources and closeness. Numbers of ties for bonding and bridging each consists of 2 and 4 items while resource and closeness for bonding and bridging each consists of 4 and 6 items (see Table 4).

Table 4
The Items Used to Measure Different Components of Bonding and Bridging Social Capital

Bonding	Numbers of ties	Most of my friends were from my own country.
		I was a member of organizations/clubs which predominantly consist of people from my own country.
	Resource and closeness	I often hung out with friends from my own country
		I felt more comfortable to socialize with friends from my own country.
		I preferred to seek help from friends from my own country.
Bridging	Numbers of ties	I had lots of local Irish friends.

	I had lots of friends who were neither from my own country nor Irish.
	I was a member of organizations/clubs which predominantly consist of Irish people.
	I was a member of organizations/clubs which predominantly consist of people neither from my own country nor Irish.
Resource and closeness	I hung out with Irish friends (coffee, movie, drinks) at least once per month.
	I preferred to seek help from my Irish friends.
	I used to visit Irish friends' house or they visited my house.
	I hung out with international friends (coffee, movie, drinks) at least once per month.
	I preferred to seek help from my international friends.
	I used to visit international friends' house or they visited my house.

Note: Range: 1(disagree)-5(agree).

Table 5
Logistic Regression Predicting the Likelihood of Staying vs Returning
Bonding vs Bridging

	Model 1	Model 2
Degree		
Bachelor	Ref.	Ref.
Master's	0.30	0.29
	(0.20)	(0.20)
PhD	0.86	0.86
	(0.77)	(0.77)
Major (STEM)	3.73*	3.65*
	(2.02)	(2.00)
University (Dublin-based)	1.99	1.91
	(1.05)	(1.03)
English ability	1.20*	1.20*
	(0.09)	(0.09)
Work experience	0.99	0.99
	(0.33)	(0.13)
Internship experience	0.61	0.62
	(0.19)	(0.20)
Bonding social capital	0.90	-
	(0.04)	
Bonding social capital (numbers of ties)	-	0.84
		(0.16)
Bonding social capital (resources and closeness)	-	0.94
		(0.11)
Bridging social capital	1.22***	-
	(0.05)	
Bridging social capital (numbers of ties)	-	1.13
		(0.14)
Bridging social capital (resources and closeness)	-	1.27**
		(0.11)
Family social capital from home country	1.28	1.24
	(0.45)	(0.44)

Gender (Male)	0.69	0.73
	(0.28)	(0.31)
Age	0.97	0.97
	(0.10)	(0.10)
Original plan of not going back	4.36**	4.38**
	(1.95)	(1.96)
Parents' highest education (Tertiary or above)	1.04	1.07
	(0.45)	(0.47)
Years in Ireland	0.76	0.76
	(0.13)	(0.14)
Origin		
Chinese	Ref	Ref
Other Asian expect Chinese	0.73	0.71
	(0.43)	(0.42)
Latin American	1.81	2.29
	(2.62)	(3.55)
African	0.05**	0.05**
	(0.05)	(0.05)
Others	-	-
Constant	0.01	0.01
Log-likelihood	–94.90	–94.69
Observation	270	270
Pseudo R^2	0.49	0.49

Note: *p<0.05, **<0.01, ***<0.001 (two-tailed test). Standard errors in parentheses. Odds ratios and robust standard error are reported.

In Model 1 and Model 2, two human capital measures, majoring in STEM and English ability, remain significant and show positive effects on the likelihood of staying abroad. It supports our hypothesis that higher human capital, especially in the aspects of education and language skills, increases the likelihood of staying abroad upon graduation. Experience didn't show significant impact on students' destination choices.

With respect to the social capital items, in Model 1, the newly-constructed variable bridging social capital showed significant positive effect on the likelihood of staying abroad. For each unit increase in bridge social capital, the odds of staying abroad increase by a factor of 6, holding all other variables constant. On the other hand, bonding social capital, although the coefficient has the sign expected from the theory, lost its significance. A possible explanation could be that, among people who have strong bonding social capital, how it influences their destination choice upon graduation may depend on the behaviour of their peer co-nationals. If most of one's peer co-nationals or co-ethnics stayed in the West, one may have a higher likelihood to stay as well due to the benefits and help one may receive from peers; if most of one's peers returned home, he/she may also be more likely to return.

In Model 2 where social capital is disaggregated into numbers of ties versus resources and closeness, resources and closeness of bridging social capital showed significant positive effect concerning the likelihood to stay. The more resources embedded in bridging ties and the closer one is with non-conational friends, the more likely one is to stay abroad. Thus, we can conclude that compared with how many bridging friends one has, it is how resourceful they are and how close one is with them that really matters. As for bonding, neither numbers of ties nor resources and closeness reveal significant effects. Family social capital from home and social capital with supervisor and university staff remain non-significant.

As for the controls, an original plan to return and being African are found to have significant effects on destination choices. The findings are consistent with existing studies (Hazen and Albert, 2006; Soon, 2012). African students are found much more likely to return home than the reference group Chinese students. Age lost its significance compared with Table 3 and the rest of the controls showed non-significant impacts on the likelihood of staying or returning.

6. Conclusions and Implication

This study concentrates on the effect of human capital and social capital on the likelihood of staying abroad or returning home upon graduation for international students studying in Irish universities. Under the guidance of human capital theory (Schultz, 1961; Becker, 1964) and social capital theory (Putnam, 1993; Lin, 1999b), human capital was operationalized in three aspects: education, language ability and experiences, and social capital was measured in friends network, family network and academic network. An online survey was carried out among international alumni who graduated from Irish universities during 2014-2016.

The findings indicated that for international students in Ireland, better education, better language skill and possession of more bridging social capital, especially bridging ties with international students, increase their likelihood of staying and working in the West upon graduation. This supports the theoretical expectation that unlike bonding social capital, bridging social capital provide immigrants with new and non-repetitive information that is useful in settling down or finding a job in a new unfamiliar environment (Putnam, 2000). The results are also consistent with neoclassical theory of migration which argues that human

capital is a crucial factor influencing people's migration destination choices (Schultz, 1961). Moreover, drawing from Bourdieu's theorization (1980) which defines of the volume of social capital as a function of the size of the network and the volume of capital (economic, cultural and symbolic) possessed by networked individuals, bonding and bridging social capital were then decomposed into two elements: numbers of ties versus resources and closeness. Strong evidence was found to support the idea that compared with how many bridging ties one has, it is how resourceful they are and how close one is with them that can really help immigrants find jobs or settle down in host countries. The analysis also found that students with an original plan of returning home are more likely to return than those who planned to stay abroad, and that African students are more likely to return home than the Asians.

This study contributes to the literature in three ways. Firstly, while most existing studies used intention data, asking students where they plan or wish to be upon graduation, this study uses survey data conducted among alumni by asking where they are/were upon graduation. Thus, actual behaviour is observed. Secondly, this study is the first of this kind that carefully takes social network effects into consideration when analysing graduates' migration behaviour upon graduation. Most empirical studies tend to ignore how social networks, specially as a form of social capital, influence students' migration decision-making, the idea of which has been emphasized by sociologists since the late 1990s (Massey et al., 1999). This study identified three types of networks, namely friends network, family network and university/academic network and measured embedded social capital in each of the networks. A key emphasize was placed on the distinction between bonding and bridging social capital, which were believed to have different impact on the likelihood of students' staying or returning. Thirdly, this study provides the first study of this kind in an Irish context.

In terms of implications, the findings of this study would be useful at both individual and national levels. For individual students, this study identifies a clear set of factors that would influence their likelihood of staying or returning. International students who wish to stay and work in host country upon graduation would benefit from the study by knowing what they can do to increase their likelihood to stay, such as invest in their language ability, pursue higher degrees as

well as make more friends, especially with non-conational people. As for the national perspective, this study presents Irish policy-makers with an understanding of foreign students' study-to-work transition in Ireland. The significant proportion of students staying in Ireland (see Table 1) should provide Irish policy makers with an estimate of the number of people who could be available to join the work force every year. Also, the Irish Naturalisation and Immigration Service (INIS) needs to develop clear policies about how to react to work permit requests from international students who wish to stay and work in Ireland upon graduation. On the other hand, the study findings would be of concern to student-sending countries, which enable and even fund their young talents to travel overseas to study, but face the risk of eventually loosing them, resulting brain drain. Policy makers from sending countries may consider special benefits for returned students and think about policies to lure their young talents back.

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Appendix 1

Questionnaire

Dear alumni,

Thank you so much for participating in this questionnaire. The questionnaire consists of three parts. The first part asks basic questions on yourself and your study experience in Ireland, the second part asks your social relationship with friends, family and supervisors during your study time in Ireland, and the last part asks you questions on your first job experience upon graduation.

The entire questionnaire consists of 28 questions and will take you around 10 minutes to finish. Thank you for your time!

(Please note, in this questionnaire the term *Europe* refers to the EU, EEA and Swiss Confederation)

Section 1

Demographic Information and Study Experience in Ireland

1, What's your gender?

(1) Male

(2) Female

(3) Don't know/prefer not to say

2, What's your age?

___

3, What is your country of origin?

___ (All non-EU/EEA/Swiss countries listed)

4, What is your highest degree achieved?

(1) Bachelor Degree

(2) Master's Degree

(3) Doctorate Degree

5, What's the major for your highest degree? (International Standard Classification of Education

by UNESCO)

(1) Education

(2) Humanities and arts

(3) Social sciences, business and law

(4) Science

(5) Engineering, manufacturing and construction

(6) Agriculture

(7) Health and welfare

(8) Services

(9) Don't know/prefer not to say

6, Which Irish university did you graduate from most recently?

(1) National University of Ireland Maynooth.

(2) University of Limerick.

(3) Dublin City University.

(4) University College Cork.

(5) National University of Ireland Galway.

(6) University College Dublin.

(7) Trinity College Dublin.

7, Which year did you graduate from the university you chose in Question 6?

(1) 2014

(2) 2015

(3) 2016

8, Before you came to Ireland, what was your original career plan upon graduation?

(1) Stay and work in Ireland.

(2) Stay and work in other European country.

(3) Go to work in other non-European country such as the US.

(4) Work abroad for a few years then return to my home country

(4) Return and work in my home country.

(5) I didn't have a clear plan.

(5) Don't know/ prefer not to say.

9, How many years had you lived in Ireland by the time of your graduation?

___ (number of years)

10, What was your IELTS (International English Language Testing System) score you used to apply for your university programme? ___

(English native speakers pass)

If you took another type of exam, please indicate what it was and the score:

TOEFL:

Pearson Test of English:

Cambridge Exam:

UCLES:

UK Examining Boards/Bodies:

ETAPP:

Trinity ISE:

QQI FETAC ESL:

11, Please evaluate your English language ability during your study in Ireland.

(Please note: not your English ability now, but back in university times)

(English native speakers pass)

	1 Poor	2 Not too good	3 Average	4 Good enough	5 Very Good
Listening	1	2	3	4	5
Speaking	1	2	3	4	5
Reading	1	2	3	4	5
Writing	1	2	3	4	5

12, How many languages could you speak at professional working proficiency level when you graduated? __ (number)

13, How many years of working experience (including tutorial experiences) did

you have by the time of graduation? __ (Include all work experiences in all countries)

14, How many internships had you had by the time of your graduation? __ (number)

15, What is the highest education achieved by your parents?

(1) Below secondary school

(2) Secondary school

(3) Undergraduate

(4) Postgraduate

(5) Don't know/prefer not to say

Section 2

Social Relations

Instruction: In this section, the following questions relate to your social relations with friends, family or supervisors **during your study in Irish university**. So, please **recall your memory** and answer the questions below.

16, The following questions relate to your social relationship with three different groups of people back in university:

(1) people from your own country,

(2) Irish people,

(3) other international people neither from your own country nor from Ireland.

Please recall your memory and answer the questions by ticking the scale provided:

1, Disagree; 2, Somewhat disagree; 3, Neither agree nor disagree; 4, Somewhat agree; 5, Agree.

16.1 Relationship with people and friends from your own country while you studied in Ireland

- Most of my friends were from my own country. 12345
- I often hung out with friends from my own country 12345
- I felt more comfortable to socialize with friends from my own country. 12345
- I preferred to seek help from friends from my own country. 12345
- I was a member of organizations/clubs which predominantly consist of people from my own country. 12345

16.2 Relationship with Irish people and friends while you studied in Ireland

- I had lots of local Irish friends. 12345
- I hung out with Irish friends (coffee, movie, drinks) at least once per month. 12345
- I preferred to seek help from my Irish friends rather than with other people. 12345
- I used to visit Irish friends' house or they visited my house. 12345
- I was a member of organizations/clubs which predominantly consist of Irish people. 12345

16.3 Relationship with people and friends who are neither from your own country nor Irish (referred to as *international* in the following statements).

- I had lots of friends who were neither from my own country nor Irish. 12345
- I hung out with international friends (coffee, movie, drinks) at least once per month. 12345
- I preferred to seek help from my international friends. 12345
- I used to visit international friends' house or they visited my house. 12345
- I was a member of organizations/clubs which predominantly consist of international people. 12345

17, The following questions ask about your relations with partner, family members and relatives back during your study in Irish university.

17.1 Did you have a partner (boyfriend/girlfriend included) around the time of your graduation?

1, No *(If no, skip question 17.2 and 17.3)*

2, Yes.

3, Don't know/prefer not to say

17.2 What is/was your partner's nationality?

1, Irish.

2, Other European nationality other than Irish.

2, My own nationality.

3, Others (neither European nor my own nationality)

4, Don't know/prefer not to say

17.3 Where did your partner reside during the time of your study in Ireland?

1, Mostly in Ireland with me or other European countries.

2, Mostly in my home country.

3, Others (neither in Europe nor in my home country)

4, Don't know/prefer not to say.

17.4 If you had child/children during your study in Ireland, where did your child/children reside?

1, No, I didn't have a child by the time of my graduation.

2, Yes, mostly in Ireland or other European countries.

3, Yes, mostly in home country with other family members.

4, Yes, but neither in Europe nor in my home country.

5, Don't know/prefer not to say.

17.5 Where did your parents reside during your study in Ireland?

1, Mostly in Ireland or other European countries.

2, Mostly in my home country.

3, Others (neither in Europe nor my home country).

4, Don't know/prefer not to say.

17.6 Do you have any relatives living in Ireland during your study in Ireland? ___ (number)

(If no, skip the next question)

17.7 Please indicate your closeness with your relatives living in Ireland.

1, We were not close and we rarely met.

2, We had moderate relationship and we sometimes met.

3, We were very close and we often met.

18, Questions 18.1 to 18.5 are for PhD degree holders only. Please skip this section if you are an undergraduate or master's degree holder.

18.1 Did you receive a scholarship for your study in Ireland?

(1) No, I was self-funded. (If no, skip the next question)

(2) Yes, I was partially funded by a scholarship.

(3) Yes, I received a full scholarship.

(4) Don't know.

(5) Prefer not to say

18.2 If yes, please indicate the funding body:

(1) My supervisor or university.

(2) Irish government.

(3) Home country's government.

(4) Other funding body such as Erasmus, Fulbright.

(5) Others____.

(6) Prefer not to say.

18.3 How many peer-reviewed publications did you have by the time of your graduation? ___

18.4 How many academic conferences have you attended by the time of your graduation? ___

18.5 Please indicate your relationship with your academic supervisors and university staff. Do you agree with the following statements:

(1 disagree 2 somewhat disagree 3 neither agree nor disagree 4 somewhat agree 5 agree)

- I had a close relationship with my supervisors. 12345
- I found my supervisors very resourceful and helpful. 12345
- I sometimes talked about my personal issues with my supervisors. 12345
- I found the faculty in my department resourceful and helpful. 12345
- My university provided good and useful information on job market. 12345

Section 4

Your First Job Information

Instruction: The last part of this questionnaire asks you questions on your first job experience upon graduation. If your current job is your first job, that's fine. If you are still looking for your first job and not having one now, please skip to the very last question of the survey, answer it and submit. Thank you!

19, Where is/was your first job located?

(1) Ireland

(2) Other European country other than Ireland

(3) My home country

(4) Others (please specify)____

(5) Don't know/prefer not to say

20, What is/was your first job employment status?

(1) Full-time

(2) Part-time (less than 30 hours per week)

(3) Self-employed

(4) Don't know/prefer not to say

21, Which option provided below best describe your first job? (ISCO-08)

(1) Managers

(2) Professionals

(3) Technicians and associate professionals

(4) Clerical support workers

(5) Service and sales workers

(6) Skilled agricultural, forestry and fishery workers

(7) Craft and related trades workers

(8) Plant and machine operators, and assemblers

(9) Elementary occupations

(10) Others _____

(11) Don't know/prefer not to say

22, What is/was the total number of employees in your first job workplace?

(1) 1-10 people

(2) 11- 49 people

(3) 50 - 99 people

(4) 100- 199 people

(5) 200- 399 people

(6) 400- 799 people

(7) more than 800 people

(8) Don't know/prefer not to say

23, Through which channel did you get your first job? (*Please tick all applies)*

(1) I applied via job advertisement online.

(2) I applied via a job agency or university career centre.

(3) I got it via help or reference from my friends, acquaintances or family.

(4) I approached the employer directly.

(5) Other methods ____

(6) Don't know/prefer not to say

24, How much formal education do you think is required to get a job like your first job?

(1) below secondary school level = 0-10 years

(2) secondary school level = 11-12 years

(3) undergraduate level = 15-16 years

(4) master's degree level = 17-18 years

(5) doctorate level = 19-22 years

(6) Don't know/prefer not to say

25. Do you think your educational level matches/matched your first job requirement?

(1) I think I am/was under-qualified, I need more education to do my job better.

(2) I think I have/had the right amount of education to do my job well.

(3) I think I am/was over-qualified.

(4) Don't know/prefer not to say

26, Do you think your first job is/was related to what you learned in university?

(1) My first job and my degree are/were not related at all.

(2) My first job and my degree are/were not related very well.

(3) My first job and my degree are/were somewhat related.

(4) My first job and my degree are/were closely related.

(5) Don’t know/prefer not to say.

27, In general, are/were you satisfied with your first job?

(1) Dissatisfied

(2) Somewhat dissatisfied

(3) Neither satisfied nor dissatisfied

(4) Somewhat satisfied

(5) Satisfied

28, What is/was the monthly salary of your first job after tax?

_____ (please indicate currency ____)

29, Is your current job still your first job upon graduation?

(1) Yes (if yes, skip the next question)

(2) No, I changed to another job.

(3) Don’t know/prefer not to say.

30, If no, how long did you work at your first job? ____ (number of months)

31, Where are you living and working now?

(1) Ireland.

(2) Other European countries other than Ireland.

(3) My home country

(4) Others (please indicate___)

(5) Don’t know/prefer not to say.

32, If you never worked after graduation, what is the main reason? (open-end question)

_____

END OF THE SURVEY.