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# Return or Not Return? The Role of Home-Country Institutional Quality in Vietnamese Migrants' Return Intentions

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### **Abstract**

Previous research has shown that institutions matter in decisions regarding migration. This paper extends investigation of the role of institutional quality in migration to the return intentions of international migrants. Using data from a web-based survey that we conducted in OECD countries in 2016, we examine both micro-level and macro-level determinants of the intentions to repatriate among Vietnamese migrants. The results of our logistic regression analysis suggest that those migrants who attach greater importance to the institutional quality in Viet Nam are less likely to have the intention to return than other Vietnamese migrants. However, there is considerably heterogeneity by gender. The concern about institutional quality in Viet Nam is only statistically significant for males. Nonetheless, our findings underscore the necessity of institutional reforms in Viet Nam to encourage return migration for development.

# **Keywords**

institutional quality international migration return intentions Viet Nam

**JEL Classification** F22; O15.

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### 1. Introduction

The debate on why some international migrants return to their home country has centred on the impact of migrants experiencing failure versus success in the host country (Cassarino 2004). Advocates of the view that returnees are successful migrants emphasize their positive contributions to further development of the home country. On the other hand, those who believe that returnees have often experienced failure in the host country expect a less positive impact on home countries. In all cases, return migrants are known as development agents who bring with them human capital, financial capital, and advanced norms attained in the host country (Wahba 2014). Therefore, promoting voluntary return migration for development has been a key objective of policy makers in developing countries characterized by large diasporas.

In every voluntary return movement, return intentions and return decisions are inseparable (Caro *et al.* 2016). Albeit having a desire to return does not guarantee an *ex post* realization, voluntary return decisions are naturally grounded in return intentions. Theoretically, it has been argued that return intentions may signal that such migrants could positively affect the home country (Dustmann and Görlach 2016). Empirically, return intentions are found to be associated with a higher probability to remit to, invest in, and participate in the political processes of the home country (Chabé-Ferret *et al.* 2016, Dustmann and Mestres 2010 and Wolff 2015). Therefore, understanding what shapes migrants' return intentions is necessary in order to design well-targeted development policies that evoke, sustain, and materialize the willingness to return among migrants. However, while huge academic and political attention has already been paid to observed return migration (for example, OECD, 2008), research on return intentions has to date been rather scattered and context-specific – predominantly due to a lack of appropriate data.

Extant work examining the determinants of return intentions has been mainly developed within the integration and transnationalism theoretical framework. More specifically, in this framework the relative strength of attachment to the host country and engagement with the home country both matter for the return intentions of migrants, independent of individual heterogeneity (Carling and Pettersen 2014). Notably, the return intentions of migrants vary across countries of origin (Alberts and Hazen 2005, Carling and Pettersen 2014 and Caro *et al.* 2016), and migrants from less developed countries are more likely to have a lower propensity to return (Jensen and Pedersen 2007). This variation is attributed to the macro-level context in the home country, which has long been argued to be fundamental to the re-adaptation process of returnees (Cerase 1974). Notwithstanding this, empirical models examining what predicts return intentions are consistently inclusive of individual-specific variables, but often exclude macro-level factors.

In recent years, literature has been emerging on institutional quality as a significant macro-level factor that drives migration decisions. Institutions affect the spatial movement of people in opposite directions, depending on whether a 'pull' or 'push' mechanism is at play. As migrants are assumed to be rational and utility maximising, they are attracted to countries with better institutions and steer away from countries with worse institutions (see Baudassé *et al.* 2017 for a recent review). Particularly, Cassarino (2004) argued that the development potential of return migration is contingent on the willingness and readiness of migrants to return home, which in turn depends on their perceptions of the institutional, economic, and political conditions in the home country. So far, there is to our knowledge no empirical evidence that links the theoretically discussed role of institutional quality to the self-reported return intentions of migrants.

This paper aims to contribute to filling this literature gap by providing an empirical analysis of the return intentions of Vietnamese migrants living in OECD countries. We apply a logistic regression model including both micro-level and macro-level determinants of return intentions. Our novel contribution is the inclusion of the perceptions of Vietnamese migrants of institutional quality in Viet Nam as a determinant of return intentions. This extends the role of institutional quality in migration research to the under-exploited area of studying *ex ante* return decisions. The data used in this analysis were derived from a web-based survey that we conducted in OECD countries in 2016.

Viet Nam is a net migrant sending country<sup>1</sup> with a diaspora of roughly 2.6 million people in 2013, and was ranked among the top ten remittance receiving countries in 2015 (Ratha *et al.* 2016). The Vietnamese diasporic community has been asserted in statutory provisions of Viet Nam as an inseparable part of the nation. Accordingly, the Vietnamese government has launched a variety of policies and action plans to strengthen the connection with the Vietnamese diasporic community and to encourage their return for development. However, these efforts appear to have had limited effectiveness. Given that institutional quality remains much higher in OECD host countries than in Viet Nam, the low return rate of Vietnamese migrants may be at least partially attributed to institutional quality in Viet Nam remaining relatively low. We test this empirically using a logit regression model of return migration intentions.

The remainder of this paper is structured as follows. Section 2 reviews the main determinants of return intentions. Section 3 presents the data and the applied research method. Section 4 reports and discusses the results. Section 5 concludes.

## 2. The Determinants of Return Intentions

Both micro-level and macro-level factors may shape the return intentions of migrants (Paparusso and Ambrosetti 2017). Micro-level factors encompass integration in the host country, ties with the home country, migration history, and the individual demographic

A brief review of the history of Viet Nam's international migration experience is available in Tran *et al.* (2017).

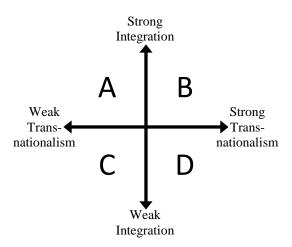
characteristics of migrants. Social, economic, institutional, and other conditions pertaining to pairs of host and home countries represent the macro-level factors. In this section, we review these main determinants of migrants' return intentions.

Integration and transnationalism are two pivotal concepts in the theoretical framework for examining return intentions. While the strength of engagement with the home country is predicted to have a positive correlation with return intentions (de Haas and Fokkema 2011), views on the relationship between integration in the host country and the wish to return have diverged (Anniste and Tammaru 2014). Assimilation theorists suggest a negative relationship due to integration in the host society substituting for homeland ties. In contrast, transnationalism and social network theorists assume a complementarity between integration and cross-border linkages with the home country, with deeper integration facilitating return migration. We conclude that, since integration and homeland engagement mutually drive return intentions, these concepts should be simultaneously considered. Carling and Pettersen (2014) developed the integration-transnationalism matrix that allows four different possibilities for the relative strength of attachment to pairs of home and host countries (see Figure 1). Their bivariate analysis predicts that migrants in quadrant D characterized by strong transnationalism and weak integration demonstrate the highest likelihood of returning. The matrix's prediction was confirmed by their empirical investigation of the return intentions of immigrants in Finland, and more recently by other research on immigrants in the Netherlands (Bilgili and Siegel 2017), and Moroccans in Italy (Paparusso and Ambrosetti 2017). Researchers have employed a wide range of indicators, separately or as an index, to measure these two concepts. Legal status, employment, dependants living in the host country, language fluency, host country media and cultural consumption, friends among native citizens, organizational engagement, voting participation, property ownership, investment in the host country, satisfaction, and sense of belonging are conventional indicators of integration. Dependants living in the home country, origin country media and cultural consumption, sending remittances, visiting home, organizational engagement, property ownership, and investment in the home country have been widely employed to reflect ties with the home country.

Duration-of-stay is the most commonly used indicator of migration history; however, its effect on return intentions is controversial. Duration-of-stay was found to have an insignificant impact on the return intentions of migrants from Egypt, Morocco, Turkey, Ghana, and Senegal living in Italy and Spain (de Haas and Fokkema 2011), female migrants from Kyrgyzstan, Tajikistan, and Uzbekistan living in Russia (Agadjanian *et al.* 2014), and migrants from Estonia living in Finland (Anniste and Tammaru 2014). In contrast, Moroccans in Europe have been found to be more prone to returning to the home country when their duration-of-stay extends (de Haas *et al.* 2014, Paparusso and Ambrosetti 2017). As explained by de Haas *et al.* (2014), Moroccan migrants are more likely to return for retirement. But, Waldorf (1995) and Güngör and Tansel (2014) found a negative relationship between duration-of-stay and the likelihood of

intending to return, among guest workers in Germany and Turkish professionals living abroad, respectively. This negative relationship reflects the cumulative inertia effect, originally discovered in internal migration research (for example, Morrison 1967), but subsequently extended to cross-border migration where it has been found that living longer in the host country tends to facilitate assimilation and thereby deter repatriation (for example, Waldorf and Esparza 1991).

Figure 1: Reproduction of Carling and Pettersen (2014) Integration-Transnationalism Matrix



Demographic characteristics of migrants, such as age, gender, marital status, and education are included as conventional control variables in quantitative analyses of return intentions. Whereas a number of studies have found no significant impacts of age (Agadjanian et al. 2014, de Haas and Fokkema 2011, de Haas et al. 2014), gender (Anniste and Tammaru 201, Bilgili and Siegel 2017, de Haas and Fokkema 2011, de Haas et al. 2014, Waldorf 1995), marital status (Agadjanian et al. 2014, Bilgili and Siegel 2017, Waldorf 1995), or education (Agadjanian et al. 2014 and Anniste and Tammaru 2014) on the willingness to return, others have reported a significant influence for these factors. An increase in age has been found to have a positive impact on the likelihood of intending to return (Bilgili and Siegel 2017, Carling and Pettersen 2014, Paparusso and Ambrosetti 2017, Waldorf 1995); however, a negative effect was found by Güngör and Tansel (2014). Males may be more prone to wishing to return than females (Carling and Pettersen, 2014; Güngör and Tansel 2014, Paparusso and Ambrosetti 2017). Married migrants may be more tied to the host country (Paparusso and Ambrosetti 2017). Higher levels of education attainment have been associated with higher likelihood of willingness to return (de Haas and Fokkema 2011, de Haas et al. 2014, Paparusso and Ambrosetti 2017). Conversely, Carling and Pettersen (2014) reported a nonlinear effect of education attainment on return intentions. Migrants with very low or very high levels of education have the lowest odds of intending to return.

Moreover, studies using datasets of migrants from many different countries have also included country of origin as a predictor of return intentions, in order to account for origin-

country-specific heterogeneity. Return intentions have indeed been found to be heterogeneous between migrants from different origin countries, and this variation has been attributed to the origin-country-specific contextual factors (Agadjanian et al. 2014, Alberts and Hazen 2005 and Carling and Pettersen 2014). These arguments reinforce the need to consider the social, economic, political, and institutional conditions in the origin country, and the interactions between contextual and micro-level factors, in order to understand return intentions. Notwithstanding this need, few studies consider these important factors. Güngör and Tansel (2014) included economic instability and uncertainty in the origin country in their econometric model and found it had a strong negative effect on the return intentions of Turkish migrants. Unfavourable economic conditions in Turkey were perceived as a push factor and discouraged return. Bilgili and Siegel (2017) allowed for variation in levels of trust in the origin country economy in their multivariate analysis. They found that higher levels of trust in the origin country economy were associated with higher likelihood of permanent return among Afghan, Burundian, Ethiopian, and Moroccan migrants living in the Netherlands. So far, attempts to account for macro-level factors in the origin country have focused only on economic conditions. The current paper adds the quality of institutions to the range of origin country characteristics to be considered.

### 3. Data and Research Method

Data for this study were collected using a web-survey of Vietnamese migrants living in OECD countries conducted in 2016. We designed an online questionnaire to collect data on individual background characteristics, migration history, integration in the host country, ties with Viet Nam, evaluation of institutional quality in pairs of host and home countries, and the importance of institutional quality in Viet Nam to the respondents' return intentions. The questionnaire was completed as a web-survey (n=130) and hard copies (n=29) distributed to Vietnamese individuals and associations in OECD countries. Our usable sample contains 159 respondents aged between 21 and 75 years living in 18 host countries.

The dependent variable is a dichotomous indicator of whether or not a respondent intends to return to the home country (Viet Nam). Respondents were asked if they intend to return to Viet Nam permanently or for a period of at least 12 months or longer. They were offered four options: *Yes, No, Not sure*, and *I have never thought about this*. The frequencies for each of the four response options are 27, 79, 43, and 10, respectively. Those who chose *Yes* are classified as having a return intention. The proportion of this group in the sample is 17 per cent (see Table 1). The rest constitute the group of not having return intention. Hence, having an intention to return to Viet Nam is a dichotomous variable (yes=1, otherwise=0).

The independent variables include individual demographic characteristics, migration history, integration in the host country, ties with Viet Nam, and the self-perceived importance of institutional quality in Viet Nam – the variable of interest. Individual demographic

characteristics are represented by *age* (years), *gender* (male=1, female=0), *marital status* (married or in a long-term relationship=1, otherwise=0), and *education* (having a postgraduate degree=1, otherwise=0). Following other studies, migration history is proxied by *duration-of-stay* in the host country (years). Age and duration-of stay are continuous variables calculated from date of birth and date of first emigration, respectively. Based on the proportions shown in Table 1, we see that Vietnamese migrants who are men, or who have a postgraduate degree, or who are neither married nor in a long-term relationship, are more likely to intend to return.

Table 1: Descriptive Statistics on Categorical Variables and Regions of Host Country

	Full Sample	rn Intention	
	Observations	Observations	Percentage
Total	159	27	17.00
Gender			
Male	82	19	23.17
Female	77	8	10.39
Marital status			
Married or in a long-term relationship	111	16	14.41
Otherwise	48	11	22.92
Education			
Postgraduate	75	15	20.00
Otherwise	84	12	14.29
Region of host country			
North America	49	6	12.24
Europe	23	7	30.43
Asia and Oceania	87	14	16.09

*Notes:* North America includes Canada and the United States of America. Europe includes Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Poland, Spain, Sweden, and the United Kingdom. Asia and Oceania include Australia, Japan, and New Zealand.

Table 2 presents the mean values of each continuous variable for the full sample, and for those with and without return intentions. It shows that those who wish to return have a higher mean age and longer mean duration-of-stay in the host country. However, neither the mean values of age nor the mean values of duration-of-stay are significantly different by return intentions.

*Integration* is the first principal component of the following ten indicators of attachment to the *host* country: (1) Employment in the host country (employed or self-employed=1, otherwise=0); (2) Legal status in the host country (permanent residency or citizenship=1, otherwise=0); (3) Having close family member(s)<sup>2</sup> in the host country (yes=1, no=0); (4) Host country language fluency (yes=1, no=0) and (5) Having friend(s) born in the host country (yes=1, no=0), (6) Member of association(s)<sup>3</sup> in the host country (yes=1, no=0), (7) Voting

<sup>&</sup>lt;sup>2</sup> Close family members include spouses, dependent children, grown-up children, and parents.

<sup>&</sup>lt;sup>3</sup> Associations include transnational associations, professional associations, community associations, religious associations, and political parties.

participation in the host country (yes=1, no=0), (8) Owning real estate in the host country (yes=1, no=0), (9) Owning a business in the host country (yes=1, no=0), and (10) Having investment project(s) in the host country (yes=1, no=0).

**Table 2: Mean Values of Continuous Variables by Return Intentions** 

	_	Return I	ntentions	<i>t</i> -test for Equality
	Full sample	Yes	No	of Mean Values (p-values)
Age	39.29	42.17	38.70	0.146
Duration-of-stay	12.91	14.00	12.69	0.586
Integration	0.00	-0.73	0.15	0.020
Ties	0.00	0.80	-0.16	< 0.001
VA	0.00	-1.27	0.26	0.004
PV	0.00	-0.65	0.13	0.068
GE	0.00	-0.65	0.13	0.053
RQ	0.00	-0.37	0.08	0.264
RL	0.00	-0.87	0.18	0.020
CC	0.00	-0.66	0.13	0.053
Q	0.00	-1.89	0.39	0.016

*Notes*: The acronyms are the first principal components indicating the importance of different dimensions of institutional quality in Viet Nam to the return intentions of Vietnamese migrants. VA: Voice and Accountability. PV: Political Stability and Absence of Violence/Terrorism. GE: Government Effectiveness. RQ: Regulatory Quality. RL: Rule of Law. CC: Control of Corruption. Q: overall summary measure of institutional quality.

*Ties* is the first principal component of seven indicators of engagement with the *home* country: (1) Having close family member(s) in Viet Nam (yes=1, no=0), (2) Frequency of visiting Viet Nam (yes=1, no=0), (3) Member of association(s) in Viet Nam (yes=1, no=0), (4) Frequency of remitting money to Viet Nam (yes=1, no=0), (5) Owning real estate in Viet Nam (yes=1, no=0), (6) Owning a business in Viet Nam (yes=1, no=0), and (7) Having investment project(s) in Viet Nam (yes=1, no=0).

Integration and ties are measured by a score with a mean of zero. Higher scores for integration represent higher levels of attachment to the host country, while higher scores for ties represent a stronger linkage with Viet Nam. As reported in Table 2, the mean scores of integration and the mean scores of ties are significantly different by return intentions at least at the five per cent level. The mean score of integration among migrants intending to return is negative, but is positive among those who want to stay. This disparity implies that Vietnamese migrants wishing to return have a weaker attachment to the host country. In contrast, the mean score of ties is positive among migrants who intend to return, but negative among those who are prone to staying. Therefore, Vietnamese migrants having return intentions demonstrate stronger engagement with Viet Nam.

The main focus of the questionnaire survey is to explore whether or not the quality of institutions in Viet Nam matters for the return intentions of Vietnamese migrants living in OECD countries. Because institutional quality is a multi-dimensional concept, we asked the respondents six sets of questions pointing to the respondents' perceptions of the different dimensions of institutional quality developed by Kaufmann et al. (1999). These dimensions include Voice and Accountability (VA), Political Stability and Absence of Violence/Terrorism (PV), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC). All of these questions were answered by means of five-point Likert scales. Initially, the respondents were asked to successively evaluate each dimension of institutional quality in their host countries and in Viet Nam. The purpose of these preliminary questions was to explore their perceptions of the disparity in institutional quality between the host and home countries. Analysing these answers, we found a robust consistency among the respondents regarding the divergence of institutional quality between their host countries and Viet Nam, where Viet Nam was perceived to have relatively lower quality of institutions.<sup>4</sup> Then, to collect data for the variable of interest, we designed sets of questions relating to each of the six dimensions of institutional quality, which asked respondents to state how important each of the dimensions of institutional quality in Viet Nam is to their return intentions. Thereby, we have six respective sets of answers – one set for each dimension. For each of the answer sets, we calculate the first principal component and interpret this principal component as an indicator of the importance of that dimension of institutional quality in Viet Nam. This procedure produces six first principal components (labelled VA, PV, GE, RQ, RL, and CC), which are all subjective measures of different dimensions of institutional quality as perceived by the migrants.

We also use the first principal component calculated from the answers to all six sets as a summary measure of institutional quality overall (labelled Q). These seven indices are each measured as a score with a mean of zero. The higher the scores, the more importance Vietnamese migrants say that they place on institutional quality in Viet Nam when considering returning home. Given the respondents' perceptions of the relatively lower institutional quality in Viet Nam, the positive mean values of VA, PV, GE, RQ, RL, and Q found among migrants

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The respondents were asked to evaluate 30 items pointing to the six dimensions of institutional quality in their host countries and in Viet Nam by means of five-point Likert scales (*Very poor, Poor, Acceptable, Good,* and *Very good*). To capture the perceived gap of institutional quality between their host countries and Viet Nam, we constructed an index that ranges from -30 (Viet Nam was perceived to have relatively lower quality of institutions across the items) to 30 (Viet Nam was perceived to have relatively higher quality of institutions across the items). The index increases by one unit if an item was reported to be better in Viet Nam. Conversely, the index decreases by one unit if an item was reported to be better in the host countries. The index remains unchanged if an item was reported to have no distinction between the host countries and Viet Nam. 'Don't know' and missing answers do not alter the value of the index. According to our calculation, the index has a skewed-right distribution with a mean of -22.81. Moreover, 97.48 per cent of the index values are below zero, indicating that most of the respondents perceived that Viet Nam has relatively lower quality of institutions than that in their host countries.

with no return intention in Table 2 imply that institutional quality in Viet Nam is likely to be a push factor. The mean values of six out of these seven indices, namely VA, PV, GE, RL, and Q, are significantly different by return intentions at least at the ten per cent level.

We acknowledge that our dataset has some limitations. First, there are some missing values associated with age, duration-of-stay, frequency of sending remittances to Viet Nam, real estate ownership in Viet Nam, and the Likert scale answers relating to the respondents' perceptions of institutional quality. Missing values of age and duration-of-stay were replaced with their respective means. Missing values of other categorical variables were replaced with their respective medians. To signal imputation, we include missing data dummies in our regression models. Second, our sample size is small and excludes Vietnamese migrants living in non-OECD countries. Moreover, the respondents are self-selected as a result of the convenience sampling method and this reduces the representativeness the sample. Caution should therefore be taken when generalizing from the results.

With our dataset in hand, we then use a logistic model to identify the relationship between return intentions and the importance of institutional quality in the home country, while controlling for the other main determinants of return intentions. Since the likelihood of having return intention varies across host country regions (see Table 1), we account for this heterogeneity in our logistic regressions by means of clustering standard errors at the host country regional level. All specifications were estimated with Stata 15.

# 4. Results and Discussion

Table 3 reports the logistic regression results in odds ratios. Columns (1) to (6) refer to six regressions of the return intentions of Vietnamese migrants, in which each uses a single different dimension of the importance of institutional quality in Viet Nam as the variable of interest. In column (7) Q is used as an overall summary index capturing the importance of all six dimensions. The results generally demonstrate that Vietnamese migrants who place more importance on institutional quality in Viet Nam when considering repatriation, are less likely to wish to return. The odds ratio is less than one in all cases, but is only statistically significant for VA, GE, RQ, and RL. In other words, the quality of institutions in Viet Nam does matter for the willingness of repatriation among the respondents, given the gap in institutional quality between the host countries and Viet Nam. Institutions are rules influencing how the economy works, and the incentives that motivate people (Acemoglu and Robinson 2012). Therefore, the quality of institutions signals an important aspect of the conditions that migrants will face upon return. If migrants are mindful of institutional quality and perceive that institutional quality in the home country is not conducive to their post-repatriation future, they are less willing to return. This finding not only underlines the importance of institutional quality in migration studies, which has been recognized in research on the ex post outcomes of migration process, but also extends its significant role to return intentions of migrants.

**Table 3: Estimates for Logit Model** 

(1)	(2)	(3)	(4)	(5)	(6)	(7)
VA	PV	GE	RQ	RL	CC	Q
1.069	1.068	1.064**	1.060**	1.076*	1.075*	1.075*
(0.052)	(0.044)	(0.032)	(0.028)	(0.041)	(0.045)	(0.047)
3.238	3.542	2.965	3.101	3.566	3.250	3.414
(4.722)	(5.366)	(3.684)	(3.734)	(5.283)	(4.496)	(5.108)
0.341**	0.354***	0.413***	0.437***	0.370***	0.390***	0.351***
(0.150)	(0.118)	(0.096)	(0.108)	(0.049)	(0.086)	(0.075)
1.511	1.206	1.100	0.939	1.015	0.942	1.147
(0.785)	(0.630)	(0.678)	(0.587)	(0.598)	(0.694)	(0.682)
1.000	0.997	1.007	1.008	0.997	1.000	0.994
(0.025)	(0.024)	(0.010)	(0.012)	(0.017)	(0.023)	(0.024)
0.592*	0.583*	0.577*	0.572*	0.574	0.579*	0.593
(0.176)	(0.172)	(0.169)	(0.174)	(0.204)	(0.179)	(0.193)
1.886*	2.019**	1.823***	1.989**	2.056*	1.940**	1.992**
(0.621)	(0.669)	(0.398)	(0.552)	(0.760)	(0.584)	(0.685)
0.724*	0.723	0.797**	0.816*	0.711*	0.741	0.847
(0.124)	(0.155)	(0.072)	(0.096)	(0.135)	(0.137)	(0.088)
-50.699	-52.372	-53.928	-54.240	-51.227	-52.803	-51.485
	VA  1.069 (0.052) 3.238 (4.722) 0.341** (0.150) 1.511 (0.785) 1.000 (0.025) 0.592* (0.176) 1.886* (0.621) 0.724* (0.124)	VA         PV           1.069         1.068           (0.052)         (0.044)           3.238         3.542           (4.722)         (5.366)           0.341**         0.354***           (0.150)         (0.118)           1.511         1.206           (0.785)         (0.630)           1.000         0.997           (0.025)         (0.024)           0.592*         0.583*           (0.176)         (0.172)           1.886*         2.019**           (0.621)         (0.669)           0.724*         0.723           (0.124)         (0.155)	VA         PV         GE           1.069         1.068         1.064**           (0.052)         (0.044)         (0.032)           3.238         3.542         2.965           (4.722)         (5.366)         (3.684)           0.341**         0.354***         0.413***           (0.150)         (0.118)         (0.096)           1.511         1.206         1.100           (0.785)         (0.630)         (0.678)           1.000         0.997         1.007           (0.025)         (0.024)         (0.010)           0.592*         0.583*         0.577*           (0.176)         (0.172)         (0.169)           1.886*         2.019**         1.823***           (0.621)         (0.669)         (0.398)           0.724*         0.723         0.797**           (0.124)         (0.155)         (0.072)	VA         PV         GE         RQ           1.069         1.068         1.064**         1.060**           (0.052)         (0.044)         (0.032)         (0.028)           3.238         3.542         2.965         3.101           (4.722)         (5.366)         (3.684)         (3.734)           0.341**         0.354***         0.413***         0.437***           (0.150)         (0.118)         (0.096)         (0.108)           1.511         1.206         1.100         0.939           (0.785)         (0.630)         (0.678)         (0.587)           1.000         0.997         1.007         1.008           (0.025)         (0.024)         (0.010)         (0.012)           0.592*         0.583*         0.577*         0.572*           (0.176)         (0.172)         (0.169)         (0.174)           1.886*         2.019**         1.823***         1.989**           (0.621)         (0.669)         (0.398)         (0.552)           0.724*         0.723         0.797**         0.816*           (0.124)         (0.155)         (0.072)         (0.096)	VA         PV         GE         RQ         RL           1.069         1.068         1.064**         1.060**         1.076*           (0.052)         (0.044)         (0.032)         (0.028)         (0.041)           3.238         3.542         2.965         3.101         3.566           (4.722)         (5.366)         (3.684)         (3.734)         (5.283)           0.341**         0.354***         0.413***         0.437***         0.370****           (0.150)         (0.118)         (0.096)         (0.108)         (0.049)           1.511         1.206         1.100         0.939         1.015           (0.785)         (0.630)         (0.678)         (0.587)         (0.598)           1.000         0.997         1.007         1.008         0.997           (0.025)         (0.024)         (0.010)         (0.012)         (0.017)           0.592*         0.583*         0.577*         0.572*         0.574           (0.176)         (0.172)         (0.169)         (0.174)         (0.204)           1.886*         2.019**         1.823***         1.989**         2.056*           (0.621)         (0.669)         (0.398)	VA         PV         GE         RQ         RL         CC           1.069         1.068         1.064**         1.060**         1.076*         1.075*           (0.052)         (0.044)         (0.032)         (0.028)         (0.041)         (0.045)           3.238         3.542         2.965         3.101         3.566         3.250           (4.722)         (5.366)         (3.684)         (3.734)         (5.283)         (4.496)           0.341**         0.354***         0.413***         0.437***         0.370***         0.390***           (0.150)         (0.118)         (0.096)         (0.108)         (0.049)         (0.086)           1.511         1.206         1.100         0.939         1.015         0.942           (0.785)         (0.630)         (0.678)         (0.587)         (0.598)         (0.694)           1.000         0.997         1.007         1.008         0.997         1.000           (0.025)         (0.024)         (0.010)         (0.012)         (0.017)         (0.023)           0.592*         0.583*         0.577*         0.572*         0.574         0.579*           (0.176)         (0.172)         (0.169)

Factor change in odds of having return intention versus no return intention. Exponentiated coefficients. N = 159. Missing data indicators are included. Clustered standard errors by three regions of current host country (North America, Europe, and Asia and Oceania) are reported in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

Regarding the other determinants of return migration intention, we see in Table 3 that the integration variable has an odds ratio that is consistently less than one. This suggests that a deeper level of integration in the host country is associated with a lower likelihood of intending to return. This effect is statistically significant in five out of seven specifications. In contrast, the odds ratios of ties are all greater than one and are statistically significant. They demonstrate a positive relationship between the level of attachment to Viet Nam and the willingness to return among the respondents. Putting it differently, those who have stronger linkages with Viet Nam, socially and economically, are more likely to report that they intend returning. In general, Vietnamese migrants who are weakly integrated in the host country and strongly tied with the home country are more likely to have repatriation intentions. These results are in line with the prediction of the integration—transnationalism matrix developed by Carling and Pettersen (2014).

Among the demographic control variables, age and marital status have significant impacts on the return intentions. Older migrants are more likely than younger migrants to want to return. Migrants who are married or in a long-term relationship are less likely than others to wish to return. The odds ratios of education are greater than one in five out of seven specifications, indicating that migrants with a postgraduate degree are more likely to intend to return. The contrast by gender is even greater, with the odds ratios suggesting that the odds of males returning are three times those of females. However, in the case of both education and gender, these odds ratio are not statistically significant. The effects of duration-of-stay are inconclusive.

We conducted several robustness checks. Firstly, we replaced the integration and ties variables by simple aggregations of their respective dichotomous indicators, rather than the first principal components. As reported in Table A1 in the Appendix, these additional results are qualitatively similar to the results presented in Table 3. Secondly, we re-estimated the logit model with a 'No' response versus all other responses. Finally, we fitted an ordered logit model with ordinal outcomes ('No' = 1, 'I have never thought about this' and 'Not sure' = 2, and 'Yes' = 3). The additional results obtained from these specifications (not shown here but available upon request) do not make any difference to the interpretation of the above discussed results.

The odds ratios associated with gender in the baseline regressions in Table 3 are notable for their large sizes and huge standard errors. As reported in Table 1, males have a much greater probability of intending to return than females (23 per cent versus 10 per cent respectively). This difference could potentially be due to heterogeneity by gender in the multivariate migration intentions model. To test this, we re-estimated the model with two sub-samples, one for each gender (82 males and 77 females). Table 4 shows that there is indeed considerable heterogeneity by gender. Remarkably, for females none of the odds ratios are statistically significant, while for males they are virtually all statistically significant. The odds ratios for age, marital status, integration, ties, and the importance of institutional quality estimated with

**Table 4: Estimates for Logit Model by Gender** 

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Different Dimensions of Institutional Quality	VA	PV	GE	RQ	RL	CC	Q	VA	PV	GE	RQ	RL	CC	Q
				Male							Female			
Age	1.265***	1.198***	1.203***	1.206***	1.259***	1.231***	1.271***	0.983	0.986	0.987	0.989	0.994	0.995	0.991
	(0.085)	(0.020)	(0.045)	(0.060)	(0.059)	(0.076)	(0.088)	(0.013)	(0.030)	(0.014)	(0.018)	(0.028)	(0.028)	(0.030)
Marital status	0.039***	0.066***	0.083**	0.072**	0.030***	0.060***	0.028**	0.555	0.619	0.617	0.673	0.697	0.616	0.626
	(0.046)	(0.025)	(0.087)	(0.086)	(0.035)	(0.063)	(0.040)	(0.499)	(0.690)	(0.705)	(0.816)	(0.940)	(0.718)	(0.750)
Education	1.304	0.816	0.665	0.583***	0.558***	0.532	0.716	1.983	1.768	1.834	1.686	1.909	1.789	1.915
	(0.544)	(0.269)	(0.173)	(0.065)	(0.030)	(0.219)	(0.181)	(1.615)	(1.358)	(1.598)	(1.217)	(1.639)	(1.428)	(1.653)
Duration-of-stay	0.903***	0.924**	0.935***	0.928***	0.910***	0.922**	0.896***	0.992	0.987	0.988	0.985	0.982	0.990	0.988
	(0.028)	(0.034)	(0.005)	(0.019)	(0.011)	(0.034)	(0.027)	(0.078)	(0.070)	(0.067)	(0.060)	(0.048)	(0.056)	(0.062)
Integration	0.569***	0.581***	0.562***	0.556***	0.581**	0.563***	0.612**	0.665	0.645	0.643	0.642	0.637	0.646	0.652
Z	(0.087)	(0.106)	(0.082)	(0.101)	(0.153)	(0.093)	(0.141)	(0.319)	(0.303)	(0.338)	(0.328)	(0.342)	(0.334)	(0.332)
Ties	3.096***	3.264***	2.702***	3.309***	3.969***	3.221***	3.687***	1.421	1.405	1.395	1.451	1.429	1.435	1.428
	(0.551)	(0.900)	(0.152)	(0.478)	(0.887)	(0.792)	(0.947)	(0.449)	(0.456)	(0.423)	(0.482)	(0.487)	(0.488)	(0.462)
The importance of	0.541***	0.565*	0.673***	0.693*	0.550***	0.624*	0.724**	0.889	0.973	0.951	0.891	0.848	0.831	0.935
institutional quality	(0.068)	(0.178)	(0.088)	(0.135)	(0.119)	(0.179)	(0.104)	(0.229)	(0.294)	(0.117)	(0.124)	(0.229)	(0.222)	(0.135)
N	82	82	82	82	82	82	82	77	77	77	77	77	77	77
Log pseudo-likelihood	-22.569	-26.020	-27.620	-28.119	-24.704	-26.875	-24.277	-21.631	-21.859	-21.845	-21.747	-21.499	-21.515	-21.647

Factor change in odds of having return intention versus no return intention. Exponentiated coefficients. Missing data indicators are not included. Clustered standard errors by three regions of current host country (North America, Europe, and Asia and Oceania) are reported in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

Table 5. Estimates for Logit Model using Deconstructed Integration and Ties Variables

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
VA	PV	GE	RQ	RL	CC	Q	VA	PV	GE	RQ	RL	CC	Q
			Male							Female			
1.231***	1.167***	1.175***	1.174***	1.213***	1.201***	1.224***	0.974*	0.979	0.981	0.980	0.985	0.985	0.982
(0.082)	(0.009)	(0.037)	(0.052)	(0.055)	(0.043)	(0.071)	(0.014)	(0.034)	(0.021)	(0.023)	(0.028)	(0.027)	(0.029)
0.047**	0.076***	0.094**	0.087*	0.042**	0.066***	0.039**	0.609	0.671	0.671	0.692	0.724	0.636	0.670
(0.066)	(0.049)	(0.101)	(0.117)	(0.053)	(0.069)	(0.055)	(0.537)	(0.680)	(0.738)	(0.796)	(0.886)	(0.673)	(0.748)
1.131	0.737	0.642	0.558*	0.553**	0.492*	0.680	2.708	2.411	2.561	2.372	2.639	2.450	2.599
(0.696)	(0.207)	(0.296)	(0.166)	(0.167)	(0.207)	(0.298)	(2.467)	(2.019)	(2.434)	(1.900)	(2.544)	(2.040)	(2.447)
0.916***	0.938***	0.948***	0.945***	0.928***	0.935***	0.916***	1.004	0.989	0.993	0.989	0.989	1.000	0.996
(0.025)	(0.023)	(0.004)	(0.017)	(0.003)	(0.014)	(0.014)	(0.088)	(0.063)	(0.047)	(0.047)	(0.035)	(0.044)	(0.055)
0.841	0.849	0.807	0.804	0.815	0.837	0.853	0.926	0.902	0.907	0.898	0.895	0.926	0.917
(0.388)	(0.334)	(0.237)	(0.224)	(0.341)	(0.269)	(0.384)	(0.429)	(0.422)	(0.487)	(0.468)	(0.451)	(0.472)	(0.446)
0.475	0.460*	0.466*	0.444*	0.531	0.440	0.526	0.464**	0.480***	0.471***	0.482***	0.475**	0.460**	0.469**
(0.279)	(0.190)	(0.200)	(0.217)	(0.287)	(0.232)	(0.307)	(0.177)	(0.133)	(0.137)	(0.121)	(0.142)	(0.155)	(0.158)
2.188***	2.369***	2.096***	2.284***	2.368***	2.239***	2.264***	1.418	1.424	1.432	1.413	1.381	1.395	1.410
(0.250)	(0.275)	(0.061)	(0.036)	(0.237)	(0.139)	(0.322)	(0.451)	(0.499)	(0.477)	(0.494)	(0.423)	(0.445)	(0.439)
3.481***	3.834***	3.218***	3.982***	4.646***	4.119***	4.308***	1.291	1.250	1.231***	1.269**	1.279*	1.315**	1.288*
(0.633)	(0.864)	(0.613)	(0.781)	(0.531)	(0.162)	(0.240)	(0.204)	(0.189)	(0.066)	(0.132)	(0.170)	(0.165)	(0.180)
0.573***	0.617*	0.721***	0.776	0.615**	0.657**	0.764**	0.877	0.982	0.931	0.957	0.874	0.843	0.940
(0.079)	(0.158)	(0.083)	(0.162)	(0.125)	(0.129)	(0.090)	(0.280)	(0.344)	(0.120)	(0.124)	(0.227)	(0.215)	(0.142)
82	82	82	82	82	82	82	77	77	77	77	77	77	77
-23.463	-26.618	-27.993	-28.598	-25.994	-27.168	-25.421	-21.317	-21.587	-21.547	-21.572	-21.335	-21.278	-21.408
	VA  1.231*** (0.082) 0.047** (0.066) 1.131 (0.696) 0.916*** (0.025) 0.841 (0.388) 0.475 (0.279) 2.188*** (0.250) 3.481*** (0.633) 0.573*** (0.079) 82	VA PV  1.231*** 1.167*** (0.082) (0.009) 0.047** (0.066) (0.049) 1.131 0.737 (0.696) (0.207) 0.916*** 0.938*** (0.025) (0.023) 0.841 0.849 (0.388) (0.334) 0.475 0.460* (0.279) (0.190) 2.188*** 2.369*** (0.250) (0.275) 3.481*** 3.834*** (0.633) (0.864) 0.573*** 0.617* (0.079) (0.158) 82 82	VA         PV         GE           1.231***         1.167***         1.175***           (0.082)         (0.009)         (0.037)           0.047**         0.076***         0.094**           (0.066)         (0.049)         (0.101)           1.131         0.737         0.642           (0.696)         (0.207)         (0.296)           0.916***         0.938***         0.948***           (0.025)         (0.023)         (0.004)           0.841         0.849         0.807           (0.388)         (0.334)         (0.237)           0.475         0.460*         0.466*           (0.279)         (0.190)         (0.200)           2.18***         2.369***         2.096***           (0.250)         (0.275)         (0.061)           3.481***         3.834***         3.218***           (0.633)         (0.864)         (0.613)           0.573***         0.617*         0.721***           (0.079)         (0.158)         (0.083)           82         82         82	VA         PV         GE         RQ           Male           1.231***         1.167***         1.175***         1.174***           (0.082)         (0.009)         (0.037)         (0.052)           (0.047**         0.076***         0.094**         0.087*           (0.066)         (0.049)         (0.101)         (0.117)           1.131         0.737         0.642         0.558*           (0.696)         (0.207)         (0.296)         (0.166)           0.916***         0.938***         0.948***         0.945***           (0.025)         (0.023)         (0.004)         (0.017)           0.841         0.849         0.807         0.804           (0.388)         (0.334)         (0.237)         (0.224)           0.475         0.460*         0.466*         0.444*           (0.279)         (0.190)         (0.200)         (0.217)           2.188***         2.369***         2.096***         2.284***           (0.250)         (0.275)         (0.061)         (0.036)           3.481***         3.834***         3.218***         3.982***           (0.633)         (0.864)         (0.613)         (0.781)	VA         PV         GE         RQ         RL           Male           1.231***         1.167***         1.175***         1.174***         1.213***           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)           0.047**         0.076***         0.094**         0.087*         0.042**           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)           1.131         0.737         0.642         0.558*         0.553**           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)           0.916***         0.938***         0.948***         0.945***         0.928***           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)           0.841         0.849         0.807         0.804         0.815           (0.388)         (0.334)         (0.237)         (0.224)         (0.341)           0.475         0.460*         0.466*         0.444*         0.531           (0.279)         (0.190)         (0.200)         (0.217)         (0.287)           2.188***         2.369***         2.284***         2.368***           (0.250)         (	VA         PV         GE         RQ         RL         CC           Male           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)           0.047**         0.076***         0.094**         0.087*         0.042**         0.066***           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)           1.131         0.737         0.642         0.558*         0.553**         0.492*           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)           0.916***         0.938***         0.948***         0.945***         0.928***         0.935***           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)         (0.014)           0.841         0.849         0.807         0.804         0.815         0.837           (0.388)         (0.334)         (0.237)         (0.224)         (0.341)         (0.269)           0.475         0.460*         0.466*         0.444*         0.531         0.440	VA         PV         GE         RQ         RL         CC         Q           Male           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)           0.047**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.055)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)           0.916****         0.938***         0.948***         0.945***         0.928***         0.935****         0.916***           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)         (0.014)         (0.014)           0.841         0.849         0.807         0.804         0.815         0.837         0.853           (0.388)         (0.334)         (0.237) <t< td=""><td>VA         PV         GE         RQ         RL         CC         Q         VA           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)           (0.047**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**         0.609           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.055)         (0.537)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)           0.916***         0.938***         0.945***         0.928***         0.935***         0.916***         1.004           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)         (0.014)         (0.014)         (0.088)           0.841         0.849         0.807         0.804         0.815         0.837</td><td>VA         PV         GE         RQ         RL         CC         Q         VA         PV           Male           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*         0.979           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)           (0.04**         0.076***         0.087*         0.042**         0.066***         0.039**         0.609         0.671           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.537)         (0.680)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708         2.411           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)           0.916***         0.938***         0.948***         0.928***         0.935***         0.916***         1.004         0.989           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)         (0.014)</td><td>VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*         0.979         0.981           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)           (0.04**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**         0.609         0.671         0.671           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.055)         (0.537)         (0.680)         (0.738)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708         2.411         2.561           (0.96)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)         (2.434)           0.916****         0.938****         0.948****         0.945****         0.928****         0.935***         0.916****         1.004</td><td>VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE         RQ           1.231****         1.167***         1.175***         1.174***         1.213***         1.224***         0.974*         0.979         0.981         0.980           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)         (0.023)           0.047**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**         0.609         0.671         0.671         0.692           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.557)         (0.680)         0.738         (0.796)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708         2.411         2.561         2.372           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)         (2.434)         (1.900)           0.916****         0.938****         0.948****         0.928***</td><td>VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE         RQ         RL           1.231***         1.167***         1.175***         1.175***         1.213***         1.201***         1.224***         0.974*         0.979         0.981         0.980         0.985           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)         (0.023)         (0.028)           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.557)         (0.680)         (0.577)         (0.680)         0.724           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.557)         (0.680)         (0.738)         (0.796)         (0.886)           1.131         0.737         0.642         0.558*         0.553****         0.492**         0.680         2.708         2.411         2.561         2.372         2.639           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)         (2.434)</td><td>VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE         RQ         RL         CC           Male           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*         0.979         0.981         0.980         0.985         0.985           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)         (0.023)         (0.028)         (0.027)           (0.047**         (0.076****)         (0.049**         0.069**         0.042**         0.066**         0.039**         0.699         0.671         0.661         0.671         0.676         0.680         0.738)         (0.796)         (0.886)         (0.673)           1.131         0.737         0.642         0.558**         0.553**         0.492**         0.680         2.708         2.411         2.561         2.372         2.639         2.450           0.916****         0.938****         0.948****         0.948****         0.948***         0.948***         0.949***         0.680         2.708         2.4</td></t<>	VA         PV         GE         RQ         RL         CC         Q         VA           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)           (0.047**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**         0.609           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.055)         (0.537)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)           0.916***         0.938***         0.945***         0.928***         0.935***         0.916***         1.004           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)         (0.014)         (0.014)         (0.088)           0.841         0.849         0.807         0.804         0.815         0.837	VA         PV         GE         RQ         RL         CC         Q         VA         PV           Male           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*         0.979           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)           (0.04**         0.076***         0.087*         0.042**         0.066***         0.039**         0.609         0.671           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.537)         (0.680)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708         2.411           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)           0.916***         0.938***         0.948***         0.928***         0.935***         0.916***         1.004         0.989           (0.025)         (0.023)         (0.004)         (0.017)         (0.003)         (0.014)	VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*         0.979         0.981           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)           (0.04**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**         0.609         0.671         0.671           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.055)         (0.537)         (0.680)         (0.738)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708         2.411         2.561           (0.96)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)         (2.434)           0.916****         0.938****         0.948****         0.945****         0.928****         0.935***         0.916****         1.004	VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE         RQ           1.231****         1.167***         1.175***         1.174***         1.213***         1.224***         0.974*         0.979         0.981         0.980           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)         (0.023)           0.047**         0.076***         0.094**         0.087*         0.042**         0.066***         0.039**         0.609         0.671         0.671         0.692           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.557)         (0.680)         0.738         (0.796)           1.131         0.737         0.642         0.558*         0.553**         0.492*         0.680         2.708         2.411         2.561         2.372           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)         (2.434)         (1.900)           0.916****         0.938****         0.948****         0.928***	VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE         RQ         RL           1.231***         1.167***         1.175***         1.175***         1.213***         1.201***         1.224***         0.974*         0.979         0.981         0.980         0.985           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)         (0.023)         (0.028)           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.557)         (0.680)         (0.577)         (0.680)         0.724           (0.066)         (0.049)         (0.101)         (0.117)         (0.053)         (0.069)         (0.557)         (0.680)         (0.738)         (0.796)         (0.886)           1.131         0.737         0.642         0.558*         0.553****         0.492**         0.680         2.708         2.411         2.561         2.372         2.639           (0.696)         (0.207)         (0.296)         (0.166)         (0.167)         (0.207)         (0.298)         (2.467)         (2.019)         (2.434)	VA         PV         GE         RQ         RL         CC         Q         VA         PV         GE         RQ         RL         CC           Male           1.231***         1.167***         1.175***         1.174***         1.213***         1.201***         1.224***         0.974*         0.979         0.981         0.980         0.985         0.985           (0.082)         (0.009)         (0.037)         (0.052)         (0.055)         (0.043)         (0.071)         (0.014)         (0.034)         (0.021)         (0.023)         (0.028)         (0.027)           (0.047**         (0.076****)         (0.049**         0.069**         0.042**         0.066**         0.039**         0.699         0.671         0.661         0.671         0.676         0.680         0.738)         (0.796)         (0.886)         (0.673)           1.131         0.737         0.642         0.558**         0.553**         0.492**         0.680         2.708         2.411         2.561         2.372         2.639         2.450           0.916****         0.938****         0.948****         0.948****         0.948***         0.948***         0.949***         0.680         2.708         2.4

Factor change in odds of having return intention versus no return intention. Exponentiated coefficients. Missing data indicators are not included. Clustered standard errors by three regions of current host country (North America, Europe, and Asia and Oceania) are reported in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

the sub-sample of males are qualitatively similar to those obtained with the pooled data. Additionally, the odds ratios of duration-of-stay, which are not significant when using the pooled data, become consistently statistically significant for the males-only sub-sample. All other things being equal, men who have stayed longer in the host country are less likely to report an intention to return to Viet Nam. This finding is in line with the widely known cumulative inertia effect in the migration literature. The effect of education remains inconclusive.

To tease out the unexplained return intentions of Vietnamese female migrants, we deconstruct integration and ties into separate dimensions, including social integration, structural integration, social ties, and economic ties. These indices are measured as simple aggregations of their respective dichotomous indicators. We follow several studies in the literature (Anniste and Tammaru 2014, de Haas et al. 2014 and Paparusso and Ambrosetti 2017), and posit that social integration encompasses legal status, having close family member(s) in the host country, language fluency, having friend(s) born in the host country, member of association(s) in the host country, and voting in the host country. With respect to structural integration, we assume that this comprises employment, owning real estate or a business in the host country, and having investment project(s) in the host country. Social ties are reflected in having close family member(s) in Viet Nam, visiting Viet Nam, sending remittances to Viet Nam, and being a member of association(s) in Viet Nam. Finally, economic ties are measured by owning real estate or a business in Viet Nam, and having investment project(s) in Viet Nam. As reported in Table 5, significant predictors of the return intentions of female migrants are structural integration and economic ties. The more that female migrants are structurally integrated in the host country, the less likely they are to report an intention to return. On the other hand, economic ties with Viet Nam increase the likelihood of having return intentions. The direction of the effects of these predictors are consistent with those of integration and ties found in the baseline regressions using the full sample. Interestingly, the return intentions of female migrants are unrelated to the extent to which they are concerned about the lower institutional quality in Viet Nam, whereas the difference in institutional quality between the home and host country matters a lot to the males.

# 5. Conclusions

In this paper, we extend the salience of institutional quality in international migration to an under-researched aspect: return intentions. Previous work has shown how important institutional quality has been *ex post* when analysing return migration to Viet Nam (see Tran *et al.* 2017). The current study enriches the literature by providing empirical evidence that institutional quality in the home country also matters for return migration *ex ante*. By examining the return intentions of Vietnamese migrants living in OECD countries, we find that Vietnamese migrants who report that institutional quality in Viet Nam (which has been relatively lower than that in OECD countries) is more important to them are less likely to intend

to return to Viet Nam. The perception of unfavourable institutional quality back home reduces their willingness to repatriate. In line with the prediction of the integration—transnationalism matrix, Vietnamese migrants with weaker attachment to the host country and stronger linkages with the home country are more likely to intend to return. Notably, the effect of homeland ties is larger than the effect of host country integration. Therefore, our findings suggest that Vietnamese policy makers can potentially boost return migration by promoting homeland engagement among the Vietnamese diaspora. Facilitating home ownership and encouraging business activities by the diaspora in Viet Nam, and other transnational practices, appear to be promising areas for policy intervention.

More generally, the effectiveness of any policy measures implemented to promote return migration for development is naturally dependent on the contextual factors in the home country. In developing countries where there are still constraints to creating better institutions, policies that aim to encourage return migration are less likely to be effective since low institutional quality is acting as a push factor. Consequently, it is of pivotal importance to combine policies encouraging return migration with institutional reforms to make the home country more attractive to potential returnees.

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Appendix

Table A1. Estimates for Logit Model using Integration and Ties Measured as Simple Aggregations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Different Dimensions of Institutional Quality	VA	PV	GE	RQ	RL	CC	Q
Age	1.060	1.058*	1.057**	1.050**	1.065**	1.065*	1.065*
	(0.041)	(0.033)	(0.025)	(0.021)	(0.029)	(0.035)	(0.035)
Gender	3.082	3.353	2.880	2.947	3.267	3.080	3.188
	(4.413)	(5.027)	(3.652)	(3.561)	(4.608)	(4.184)	(4.604)
Marital status	0.361***	0.375***	0.422***	0.446***	0.383***	0.397***	0.369***
	(0.126)	(0.097)	(0.075)	(0.087)	(0.031)	(0.064)	(0.056)
Education	1.596	1.281	1.205	1.072	1.149	1.062	1.241
	(0.945)	(0.749)	(0.794)	(0.690)	(0.713)	(0.795)	(0.800)
Duration-of-stay	1.006	1.005	1.012	1.016	1.004	1.007	1.002
·	(0.020)	(0.018)	(0.009)	(0.011)	(0.013)	(0.018)	(0.018)
Integration	0.683*	0.676*	0.675**	0.668**	0.679*	0.677*	0.689*
_	(0.142)	(0.142)	(0.135)	(0.137)	(0.155)	(0.141)	(0.150)
Ties	1.753	1.878*	1.722**	1.830**	1.855*	1.799*	1.826*
	(0.628)	(0.688)	(0.456)	(0.543)	(0.672)	(0.582)	(0.660)
The importance of institutional quality	0.735**	0.744	0.808***	0.865	0.745**	0.766*	0.862*
in the home country	(0.115)	(0.152)	(0.066)	(0.087)	(0.109)	(0.118)	(0.076)
Log pseudo-likelihood	-52.070	-53.852	-55.148	-55.836	-53.149	-54.307	-53.176

Factor change in odds of having return intention versus no return intention. Exponentiated coefficients. N = 159. Missing data indicators are included. Clustered standard errors by three regions of current host country (North America, Europe, and Asia and Oceania) are reported in parentheses. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.