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Perception of Institutional Quality Difference and Return Migration Intention: The Case of the Vietnamese Diaspora

Abstract

This study examines whether the perception of difference in institutional quality between OECD destination countries and Vietnam, and the stated importance attached to such difference, influences Vietnamese migrants' intention to return home. We use data from a webbased survey (N = 159) that we conducted in 2016. The countries covered capture about 90% of the Vietnamese diaspora in the world. We find, by means of weighted logistic regression analysis with a range of measures of institutional quality, that migrants who perceive a larger institutional quality difference are less likely to have the intention to return. However, there is considerable heterogeneity by gender. Women are, if they attach importance to institutional quality, particularly concerned about control of corruption, while the between-country difference in government effectiveness and regulatory quality matters to men. Concerns about a lack of voice & accountability; and about political instability & the presence of violence/terrorism deter return migration of both genders.

Keywords

Return migration intention, institutional quality, perception, heterogeneity, Vietnam

JEL Classification

F22; O15

Introduction

The debate on why some international migrants return to their home country has centered on whether migrants have experienced failure or success in the host country (Cassarino, 2004). Advocates of the view that returnees are successful migrants emphasize the positive contributions return migrants may make to further development of the home country. On the other hand, those who believe that many returnees experienced failure in the destination country expect a less positive impact of return migrants 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 foreign country they lived in (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 intention and actual return migration are closely linked (Caro et al., 2016). Although having a desire to return does not guarantee an *ex post* realization, voluntary return decisions are naturally grounded in return intentions. It has been argued theoretically that planned temporary migration, i.e. an intention to return, signals that such migrants could be expected to 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; Wolff, 2015). Therefore, understanding what shapes migrants' return intention is necessary in order to design well-targeted development policies that evoke, sustain, and materialize the willingness to return. While huge academic and political attention has already been paid to *observed* return migration (for reviews see, e.g., Hao et al., 2017; Kunuroglu et al., 2016; OECD, 2008), research on

return *intention* is mostly more recent and has to date been rather scattered and context-specific (for a systematic review, see Mohamed and Abdul-Talib, 2020).¹

Extant work examining the determinants of return intention has been mainly developed within the integration and transnationalism theoretical framework. In this framework, the relative strength of attachment to the destination country and engagement with the home country both matter for the return intentions of migrants, independent of the heterogeneity among individuals (Carling and Pettersen, 2014). Notably, the return intentions of migrants vary across countries of origin (Alberts and Hazen, 2005; Carling and Pettersen, 2014; Caro et al., 2016). 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; Paparusso and Ambrosetti, 2017). Notwithstanding this, empirical models examining the factors that predict return migration intention 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 both directions, depending on whether a 'pull' or 'push' mechanism is at play. To the extent that migrants are assumed to be rational and utility maximizing, they are attracted to countries with better institutions and steer away from countries with worse institutions (see Baudassé et al., 2018 for a recent review). Cassarino (2004) argued that the development potential of return migration is contingent on the willingness and readiness of migrants to return

¹ Case studies of return intentions include: Turkish immigrants in Germany (Tezcan, 2019); Moroccans in Italy (Paparusso and Ambrosetti, 2017); immigrants and refugees in the Netherlands (de Vroome and van Tubergen, 2014); Central Asian migrant women in Moscow (Agadjanian et al., 2014); Estonian migrants in Finland (Anniste and Tammaru, 2014); skilled migrants from Turkey (Güngör and Tansel, 2014); international students in the United States (Alberts and Hazen, 2005); and skilled Hong Kong immigrants in Australia (Mak, 1997).

home, which in turn depends on their perception of the institutional, economic, and political conditions in the home country.

There is, to our knowledge, no empirical evidence to date that links the theoretically discussed role of institutional quality to the self-reported return intentions of migrants. We therefore contribute to filling this literature gap by providing an empirical analysis of the return intention of Vietnamese migrants living in OECD countries. Using logistic regression models, our novel contribution is the inclusion of the perceptions of Vietnamese migrants regarding institutional quality in Vietnam as a determinant of return intention. This extends the role of institutional quality in migration research to the under-explored area of studying *ex ante* return intentions.² The data used in this analysis were derived from a web-based survey that we conducted in OECD countries in 2016.

Vietnam is a net migrant sending country with a diaspora of roughly 2.7 million people in 2019 (United Nations, Department of Economic and Social Affairs, Population Division, 2019), and was ranked among the top ten remittance receiving countries in 2015 (Ratha et al., 2016). The Vietnamese diasporic community has been asserted in the statutory provisions of Vietnam as an inseparable part of the nation. Accordingly, the Vietnamese government has launched a variety of policies and action plans to strengthen connections with the Vietnamese diasporic community and to encourage their return for development. However, these efforts appear to have had limited effectiveness. The return trend of Vietnamese diaspora remains incipient and its full potential has not yet been realized (Pham, 2011). To date, the study on Vietnamese return migrants has been scant due to the unavailability of a comprehensive return migration database at the national level in Vietnam. Extant work examining return migration in Vietnam used datasets at the regional level. Tran et al. (2019a) investigated a dataset of 654 Vietnamese migrants who returned to the south central and the south of Vietnam in 2014 and

² For a study of the *impact* of diasporas on institutional quality in home countries, see Tran et al. (2021).

found that good quality of regional institutions in Vietnam acts as a positive pull factor influencing the return decisions of Vietnamese migrants. Given this effect, the low return rate of Vietnamese migrants may be at least partially attributed to institutional quality in Vietnam being perceived to be lower than that in OECD countries. We test this empirically by means of regression models of return migration intention.

The remainder of this paper is structured as follows. The next section reviews the main determinants of return intention. After that follows a presentation of the data and the applied research method. The subsequent section reports and discusses the results. The final section concludes.

Determinants of the intention to return

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 destination country, ties with the country of origin, migration history, and the demographic and other individual characteristics of migrants. Social, economic, institutional, and other conditions pertaining to pairs of destination and origin countries represent the macro-level factors.

Integration and transnationalism are two pivotal concepts in the theoretical framework for examining return intention. While the strength of engagement with the country of origin is predicted to have a positive correlation with return intention (de Haas and Fokkema, 2011), views on the relationship between integration in the destination country and the wish to return have diverged (Anniste and Tammaru, 2014). Assimilation theorists suggest a negative relationship, due to integration in the destination society substituting for homeland ties. In contrast, transnationalism and social network theorists assume a complementarity between integration and cross-border linkages with the country of origin, with deeper integration facilitating return migration. We conclude that, since integration in the destination country and engagement with the country of origin mutually drive return intention, these concepts should be simultaneously considered.

Carling and Pettersen (2014) developed an integration-transnationalism matrix that describes four different possibilities for the relative strength of attachment to pairs of origin and destination countries. Their bivariate analysis predicts that migrants 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 intention 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 integration in the destination country and ties with the country of origin. Legal status, employment, dependents living in the destination country, language fluency, destination country media and cultural consumption, friends among native citizens, organizational engagement, voting participation, property ownership, investment in the destination country, satisfaction, and sense of belonging are conventional indicators of integration. Dependents living in the origin country, origin country media and cultural consumption, sending remittances, visiting home, organizational engagement, property ownership, and investment in the origin country have been widely employed to reflect ties with the country of origin.

Duration of stay is the most commonly used indicator of migration history. However, its effect on return intention is inconclusive. 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. However, Waldorf (1995) and Güngör and Tansel (2014) both 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 (see Morrison, 1967), but subsequently extended to cross-border migration where it has been found that living longer in the destination country tends to facilitate assimilation and thereby deter repatriation (see Waldorf and Esparza, 1991).

Demographic characteristics of migrants, such as age, gender, marital status, and education are included as conventional control variables in quantitative analyses of return intentions. Table 1 summarizes evidence on the impacts of these demographic variables on return intentions.

{INSERT TABLE 1}

Studies using datasets of migrants from many different countries have also included country of origin as a predictor of return intention, 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; Carling and Pettersen, 2014). This argument reinforces 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 intention. Notwithstanding this need, few studies consider these important factors. Güngör and Tansel (2014) included

individual perceptions of economic instability and uncertainty in the origin country as a push factor in their econometric model and found that it had a strong negative effect on the return intention of Turkish migrants. Unfavorable economic conditions in Turkey, as perceived by Turkish professionals residing abroad, also encouraged non-return. Bilgili and Siegel (2017) allowed for variation in levels of trust in the origin country economy in their multivariate analysis. They found that a higher level of confidence in the origin country economy is associated with a 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 and destination countries have focused primarily on economic conditions. The current paper adds the perceived quality of institutions to the range of origin and destination country characteristics to be considered.

Data and research method

Data for this study were collected using a web-based survey of Vietnamese migrants living in OECD countries conducted in 2016. We designed a questionnaire to collect data on individual background characteristics, migration history, integration in the destination country, ties with Vietnam, evaluation of institutional quality in pairs of destination countries and Vietnam, and the self-assessed importance of institutional quality in Vietnam to the respondents' return intention.³ The questionnaire was completed as either a web-based survey (n=130) or a postal survey (n=29). The respondents were recruited through posts on Facebook pages of Vietnamese associations in OECD countries (web-based survey) or directly through Vietnamese associations in New Zealand (postal survey).⁴ Our usable sample contains 159

³ The full questionnaire is available at https://bit.ly/2OG8bPj.

⁴ New Zealand is the country where the research was based and it was therefore possible to conduct a postal survey there. Hard copies of the questionnaire were distributed to Vietnamese associations in New Zealand to recruit respondents to the extent that they were able to do so. The New Zealand respondents were also asked their willingness to pay for higher institutional quality in Vietnam in terms of a relatively lower desired wage (see Tran et al., 2019b).

respondents aged between 21 and 75 years living in 18 destination countries. These countries account for 90.7% of all Vietnamese diaspora across the world in 2015 calculated by United Nations, Department of Economic and Social Affairs, Population Division, 2019. Of the 159 individuals, 66 were from New Zealand. As reported in Table 2, New Zealand accounts for 0.28% of the Vietnamese diaspora in the world, but 41.51% of the observations in the sample. Our convenience sampling method requires us to adopt therefore a weighting procedure to enhance the global representativeness of the sample (e.g. Lamm and Lamm, 2019). To increase the representativeness of our sample, we assign a weight of 1 to the observations from New Zealand, while boosting the number of observations from other countries by means of weighting factor for the observations from destination country j that is not New Zealand (NZ) calculated as follows:

$$Weighting \ factor_{j} = \frac{World \ share_{j}}{Sample \ share_{j}} \times \frac{Sample \ share_{NZ}}{World \ share_{NZ}} \tag{1}$$

The weighting factors are rounded to the nearest integers and reported in Table 2. This weighting procedure results in the total weighted sample size of 23,156.

{INSERT TABLE 2}

Clearly, as in all applied studies with non-random sampling, the question to what extent the recruited sample is after weighting representative of the population of Vietnamese diaspora must remain an open one (e.g., Vaske et al. 2011). However, our key results are plausible on theoretical grounds, as well as empirically robust to whether we employ sample weights or not. Nonetheless, further empirical work on the role of institutional quality perception among the Vietnamese diaspora and among migrants from other source countries is clearly to be encouraged.

The dependent variable is a dichotomous indicator of whether or not a respondent intends to return to the home country (Vietnam). Respondents were asked if they intended to return to Vietnam 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 were 27, 79, 43, and 10 responses, respectively. Those who chose *Yes* (17%) were classified as having a definite return intention. Applying the weighting factors shown in Table 2 yields a very similar fraction (18%) having an intention to return (see Table 3). Having an intention to return to Vietnam is a dichotomous variable (yes=1, otherwise=0). In robustness checks, we also consider logit regressions with a dichotomy between *No* and other responses, as well as ordered probit models of the polychotomous responses. These alternative models yielded qualitatively similar results.⁵

{INSERT TABLE 3}

The independent variables include individual demographic characteristics, migration history, integration in the destination country, ties with Vietnam, the self-declared importance of institutional quality in considering return migration, and the perception of institutional quality difference between the destination country and Vietnam. 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 destination 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

⁵ Regressions were conducted in Stata 15. The programming code and data are available from the authors upon request.

shown in Table 3, we see that Vietnamese migrants who are men, or who have a postgraduate degree, or who are residing in Europe, are more likely to intend to return.⁶ Marital status matters in the unweighted sample but not in the weighted sample.

Table 4 presents descriptive statistics for each continuous variable in the unweighted and weighted samples, and the difference in weighted mean between those with and without return intention. As in Table 3, the effects of weighting are minor. Table 4 shows that those who wish to return have a higher mean age and longer mean duration of stay in the destination country.

{INSERT TABLE 4}

Integration is the first principal component⁷ of the following ten indicators of attachment to the *destination* country: (1) Employment in the destination country (employed or self-employed=1, otherwise=0), (2) Legal status in the destination country (permanent residency or citizenship=1, otherwise=0), (3) Having close family member(s) that are spouses, dependent children, grown-up children, or parents in the destination country (yes=1, no=0), (4) Destination country (yes=1, no=0), (5) Having friend(s) born in the destination country (yes=1, no=0), (6) Member of association(s) that are transnational associations, professional associations, community associations, religious associations, or political parties in the destination country (yes=1, no=0), (7) Voting participation in the destination country (yes=1, no=0), (8) Owning real estate in the destination country (yes=1, no=0), (9) Owning a business in the destination country (yes=1, no=0), and (10) Having

⁶ The differences are statistically significant at the 1% level.

⁷ Principal component analysis is a dimensionality-reduction method that is often used to produce lowdimensional representations for datasets that contain various interrelated variables. This reduction is achieved by creating new uncorrelated variables, i.e. the principal components, that successively maximize variance (Jolliffe, 2002). One criterion for selecting the optimal number of principal components is that eigenvalues are greater than one.

investment project(s) in the destination country (yes=1, no=0). The first principal component of *Integration* accounts for 32% of the total variation in the ten indicators of attachment to the destination country. Table A1 in the Appendix summarizes the descriptive statistics for these ten indicators of integration.

Ties is the first principal component of seven indicators of engagement with the *home* country: (1) Having close family member(s) in Vietnam (yes=1, no=0), (2) Visiting Vietnam (yes=1, no=0), (3) Member of association(s) in Vietnam (yes=1, no=0), (4) Remitting money to Vietnam (yes=1, no=0), (5) Owning real estate in Vietnam (yes=1, no=0), (6) Owning a business in Vietnam (yes=1, no=0), and (7) Having investment project(s) in Vietnam (yes=1, no=0). The first principal component of *Ties* accounts for 26% of the total variation in the seven indicators of engagement with the home country. Table A2 in the Appendix summarizes the descriptive statistics for these seven indicators of ties.

The indexes of integration and ties were de-meaned. Higher scores for integration represent higher levels of attachment to the destination country, while higher scores for ties represent stronger linkages with Vietnam. Table 4 appears to suggest that greater integration in the host country coincides with a greater return intention, but the difference (0.14) is not much and only significant due to the assigned sample weights. The difference in mean score of ties is much larger (1.21) and also positive, as expected. Therefore, Vietnamese migrants having return intention demonstrate stronger engagement with Vietnam.

As noted previously, the main focus of our research is to explore whether or not institutional quality matters for the return intention of Vietnamese migrants living in OECD countries. Because institutional quality is a multi-dimensional concept, we first asked the respondents how much importance they attached to six different dimensions of institutional quality developed by Kaufmann et al. (1999). These dimensions are 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).⁸

We designed sets of questions, relating to each of the six dimensions of institutional quality, which asked respondents to state how important these dimensions of institutional quality in Vietnam would be to them. All of the questions were answered by means of five-point Likert scales. We thereby obtain 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 migrant's stated importance of that dimension of institutional quality in Vietnam. These first principal components account for 79% to 95% of the variance in the respective set of answers pertaining to each dimension of institutional quality. We also use the first principal component calculated from the answers to all six sets of questions as a summary measure of the migrant's stated importance of institutional quality overall (labeled Q). Q accounts for 67% of the variance. These seven indices are each transformed into a score with a mean of zero. The higher the score, the more importance Vietnamese migrants place on that aspect of institutional quality in Vietnam when considering returning home.

Table 4 shows that for all seven indices the difference in weighted mean between those who stated that they intended to return and the weighted mean for the other migrants is negative. This means that those who intend to return attach less importance to institutional quality than those who do not.

The respondents were then asked to evaluate 30 items pointing to the six dimensions of institutional quality in their destination countries and in Vietnam by means of five-point Likert scales (Very poor, Poor, Acceptable, Good, and Very good). To capture the perceived gap of

⁸ A definition of each of the six dimensions of institutional quality and a full description of the individual variables assigned to the six indicators are available at: <u>https://info.worldbank.org/governance/wgi/Home/Documents</u>

institutional quality between their destination countries and Vietnam, we constructed an index that ranges from -30 (Vietnam was perceived by a respondent to have the relatively higher quality of institutions across all the items) to 30 (Vietnam was perceived to have the relatively lower quality of institutions across all the items). Clearly, if the respondent answered 15 items in favor of Vietnam and 15 items in favor of the destination country, the index of the perception of difference in institutional quality (PDIQ) is 0.⁹

Table 4 shows that the PDIQ index has an unweighted mean of about 22.8 (weighted: 23.8). It can also be calculated that 97.5% of the index values are above zero, indicating that most of the respondents perceived that Vietnam has relatively lower quality of institutions than their destination country. Additionally, PDIQ is the greatest for respondents from North America (24.4 weighted and 24.7 unweighted), and the least from respondents from Europe (21.8 weighted and 21.7 unweighted), with Asia and Oceania in between (23.5 weighted and 22.0 unweighted). Moreover, as expected, those who intend to return have a less positive mean PDIQ than those who do not have a return intention. Using the assigned weights, all differences are statistically significant at the 1% 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 Vietnam, real estate ownership in Vietnam, and the Likert scale answers relating to the respondents' perception of institutional quality difference. Missing values for age and duration of stay were replaced with their respective means. Missing values for 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, as noted previously, respondents are self-selected as a result of the convenience sampling method conducted via social media and could potentially

⁹ "Don't know" and missing answers do not alter the value of the index.

reduce the representativeness the sample. Although Web-based survey methods and traditional surveys have recently been suggested being qualitatively comparable in terms of approaching random samples of a research population (Dillman et al., 2010; Lamm and Lamm, 2019), surveying the general public over the Internet and via social media can be disadvantageous due to common difficulties in selection biases or low response rates (Vaske et al., 2011; Reips and Buffardi, 2012). Caution should therefore be taken when interpreting the results. Nevertheless, as noted in the introductory section, ours is the first attempt at including the perception of institutional quality difference in an evaluation of return intention.

With our dataset in hand, we use in the next section weighted logistic regression modelling to identify the relationship between return intention and the perception of difference in institutional quality, while controlling for the respondents' individual characteristics. Since the likelihood of having return intention varies across destination country regions (see Table 3), and the relationships between independent variables and return intentions may be more similar within regions than between, we cluster standard errors at the destination country regional level.

Results and discussion

Table 5 reports the weighted logistic regression results in odds ratios. Column (1) provides the basic regression that tests whether the perceived difference in institutional quality (PDIQ) matters in return migration intention. Columns (2) to (7) refer to six regressions of the return intention of Vietnamese migrants, in which each interacts PDIQ with a different weight attached to institutional quality, as reflected in the six identified different dimensions. In column (7) the weight attached to PDIQ is given by Q, a summary index capturing the importance of all six dimensions jointly.

{INSERT TABLE 5}

Columns (1)-(8) report odds ratios associated with PDIQ of less than one, i.e. return migration is less likely, the larger the perceived difference in institutional quality. The effect of PDIQ is statistically significant at the 1% level in columns (3) to (8) and at the 10% level in column (2), but not in column (1). Differences between individuals in the importance attached to institutional quality matter only in the cases of GE and RQ. The odds ratios of less than one indicate that the more weight is attached to these dimensions of institutional quality, the less likely that return migration is intended. For given PDIQ, Vietnamese migrants who attach more weight to institutional quality in Vietnam when considering repatriation are less likely to wish to return.

Given that institutions are rules influencing how the economy works and influence the incentives that motivate people (Acemoglu and Robinson, 2012), 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. While Tran et al. (2019a) provided empirical evidence that good quality of regional institutions in Vietnam acts as a positive pull factor when attracting migrants who have already returned to Vietnam to specific regions, the current study shows that perceived poor quality of institutions in Vietnam acts as a negative pull factor, impairing the willingness of migrants 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 migrants.

The interpretation of the coefficients associated with the importance of institutional quality and the perceived difference between the home and destination country in this respect is based on the assumption that these variables are uncorrelated with the errors in the logistic regression model. Clearly, there could be an issue of reverse causality and bias in the estimated

effect. If migrants intend to return, they could downplay the fact that they have to pay a price of relatively lower institutional quality back home (and Tran et al. (2019b) have shown that this price is relatively high). However, our questionnaire was designed to reduce the reverse causality bias by asking respondents to state their return intention early on (Question 13 in Part 2) before asking them to answer questions on institutional quality evaluation and the importance of institutional quality much later on (Questions 40-57 in Part 5).

With respect to the other regression variables, the odds ratios of integration show that a deeper level of integration in the destination country is associated – as expected – with a lower likelihood of intending to return (statistically significant in three regressions, with VA, PV and CC respectively). Additionally, the odds ratios of ties demonstrate a positive relationship between the level of attachment to Vietnam and the willingness to return among the respondents – statistically significant in all regressions. 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, marital status and education have significant impacts on the return intentions. Older migrants are somewhat more likely to want to return than younger migrants. Migrants who are married or in a long-term relationship are less likely than others to intend to return. The odds ratios of education are greater than one in all specifications, showing that migrants with a postgraduate degree are more likely to intend to return. The contrast by gender is also large, with the odds ratios suggesting that the log odds of a male wishing to return is two to three times that of a female. While these results are consistent with the descriptive statistics in Table 3, in the logit regression modelling the corresponding odds ratios are not statistically significant. However, this is due to heterogeneity (i.e. the effects of the other variables interact with gender), which we will elaborate on below.

Finally, a longer duration of stay is associated with a somewhat greater likelihood of the intention to return. However, the effect is not statistically significant.

We conducted several robustness checks. First, we replaced the integration and ties variables by simple aggregations of their respective dichotomous indicators, rather than the first principal components. These additional results are qualitatively similar to the results presented in Table 5.¹⁰ Second, 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 are not inconsistent with the interpretation of the results discussed above.

The odds ratios of gender in the regressions in Table 5 are notable for their large sizes and standard errors. As reported in Table 3, men have a much greater probability of intending to return than women (23% versus 10% respectively). This difference could potentially be due to heterogeneity by gender in the multivariate migration intention model. Qualitative research suggests notable gender differences in return migration intentions, related to gender roles in family and society (e.g., Buján, 2015). To test this, we re-estimated the model with two weighted sub-samples, one for each gender (82 men and 77 women in the respective samples).

Table 6 shows that there is indeed considerable heterogeneity by gender. For women age and economic ties are not statistically significant in any of the columns, while for men social integration (defined below) is not statistically significant. Heterogeneity by gender can clearly not be ignored in this literature.

{INSERT TABLE 6}

¹⁰ The results of robustness checks are available upon request from the authors.

To tease out further the effect of integration in destination countries and ties with Vietnam, we deconstructed integration and ties into two separate dimensions each: *social integration* and *structural integration*; and *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; de Vroome and van Tubergen, 2014; Paparusso and Ambrosetti, 2017; Tezcan, 2019), and posit that social integration encompasses legal status, having close family member(s) in the destination country, language fluency, having friend(s) born in the destination country. With respect to structural integration, we assume that this comprises employment, owning real estate or a business in the destination country, and having investment project(s) in the destination country. Social ties are reflected in having close family member(s) in Vietnam, and being a member of association(s) in Vietnam, and having investment project(s) in Vietnam.

Table 6 shows that older, and even more so single, Vietnamese men are more likely to have an intention to return home. While the effect of marital status still holds for females, the effect of age does not. All other things being equal, men who have stayed longer in the destination country are less likely to report an intention to return to Vietnam. This finding is in line with the widely known cumulative inertia effect in the migration literature. For females, this effect is only statistically significant in the VA regression. Women with a postgraduate degree are more likely to intend to return. For males, the effect of education is only statistically significant in the GE regression, with the odds reversed.

As shown in Table 6, significant predictors of the return intention of female migrants are social integration, structural integration and social ties. Rather surprisingly, the more that

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female migrants are socially integrated in the destination country, the more likely they are to report an intention to return (statistically significant in all the regressions), while structural integration (statistically significant in the GE and RQ regressions) and social ties (statistically significant in the CC regression) decrease the intention to return. The more that male migrants are structurally integrated in the destination country, the less likely they are to report an intention to return (statistically significant in the PV, GE, RQ and RL regressions). The effects of social and economic ties on the return migration intention of men are strikingly large: men who have strong social and economic ties with Vietnam are much more likely to intend to return than those who do not.

Finally, we see from Table 6 that the perceived difference in institutional quality is a significant predictor of return migration intention for both genders. The odds ratios are smaller than one, which is consistent with the corresponding effect found in Table 5. Once we take account of the respondent's stated importance of institutional quality in considering return migration, the intention to return home is less for those who perceive the difference in institutional quality to be large. However, even here there are interesting gender differences. Women are, if they attach importance to institutional quality, specifically concerned about control of corruption (CC). Concerns about voice and accountability (VA) and political stability and absence of violence/terrorism (PV) deter return migration of both genders.

Conclusions

In this paper, we extend the literature on the role of institutional quality in international migration to an under-researched aspect: return intention. Previous work has shown how important institutional quality has been *ex post* when analyzing return migration to Vietnam (see Tran et al., 2019a). 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 intention of Vietnamese migrants living in OECD countries, we find that Vietnamese migrants who report that institutional quality in Vietnam (which has been relatively lower than that in OECD countries) is important to them and who perceive a larger difference in institutional quality between Vietnam and their country of residence are less likely to intend to return to Vietnam. A perception of unfavorable 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 destination 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 destination 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 Vietnam, 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 deterrent to return migration. 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. Descriptive statistics for indicators of integration in the destination country

	Sample Observations	Weighted Observations	Unweighted number with return intention	Unweighted Percentage	Weighted Percentage
Total	159	23,165	27	16.98	18.27
Employment					
Employed or self-employed	115	15,925	17	14.78	15.91
Otherwise	44	7,240	10	22.73	23.45
Legal status in the destination					
country					
citizenship	106	15,380	13	12.26	18.09
Otherwise	53	7.785	14	26.42	18.61
Having close family member(s) in		.,			
the destination country					
Yes	104	15,737	14	13.46	20.05
No	55	7,428	13	23.64	14.49
Destination country language fluency					
Yes	144	20,138	24	16.67	19.27
No	15	3,027	3	20.00	11.60
Having friend(s) born in the destination country					
Yes	128	18,703	21	16.41	19.55
No	31	4,462	6	19.35	12.89
Member of association(s) in the destination country					
Yes	83	14,240	15	18.07	26.60
No	76	8,925	12	15.79	4.97
Voting participation in the destination country					
Yes	73	9,998	9	12.33	14.27
No	86	13,167	18	20.93	21.30
Owning real estate in the destination country					
Yes	82	12,734	9	10.98	19.33
No	77	10,431	18	23.38	16.97
Owning a business in the destination country					
Yes	46	7,666	4	8.70	16.42
No	113	15,499	23	20.35	19.18
Having investment project(s) in the destination country					
Yes	74	12,998	10	13.51	17.66
No	85	10,167	17	20.00	19.05

			Unweighted		
	Sample	Weighted	number	Unweighted	Weighted
	Observations	Observations	with return	Percentage	Percentage
			intention		
Total	159	23,165	27	16.98	18.27
Having close family member(s) in Vietnam					
Yes	108	13,434	18	16.67	15.99
No	51	9,731	9	17.65	21.42
Visiting Vietnam					
Yes	132	18,913	23	17.42	19.20
No	27	4,252	4	14.81	14.11
Member of association(s) in Vietnam					
Yes	27	4,319	13	48.15	46.08
No	132	18,846	14	10.61	11.90
Remitting money to Vietnam					
Yes	97	14,763	17	17.53	18.88
No	62	8,406	10	16.13	17.20
Owning real estate in Vietnam					
Yes	54	8,260	11	20.37	22.95
No	105	14,905	16	15.24	15.67
Owning a business in Vietnam					
Yes	21	3,461	5	23.81	36.84
No	138	19,704	22	15.94	15.01
Having investment project(s) in Vietnam					
Yes	28	4,606	12	42.86	49.61
No	131	18,559	15	11.45	10.49

Table A2. Descriptive statistics for indicators of ties with the home country

Tables

Demographic variables	Papers	Effect/Finding
Age	Agadjanian et al. (2014) de Haas and Fokkema (2011) de Haas et al. (2014)	No significant impact
	Bilgili and Siegel (2017) Carling and Pettersen (2014) de Vroom and van Tubergen (2014) Paparusso and Ambrosetti (2017) Waldorf (1995)	Positive impact on the likelihood of intending to return
	Güngör and Tansel (2014)	Negative impact on the likelihood of intending to return
Gender	Anniste and Tammaru (2014) Bilgili and Siegel (2017) de Haas and Fokkema (2011) de Haas et al. (2014) de Vroom and van Tubergen (2014) Waldorf (1995)	No significant impact
	Carling and Pettersen (2014) Güngör and Tansel (2014) Paparusso and Ambrosetti (2017)	Men may be more prone to wishing to return than women
Marital status	Agadjanian et al. (2014) Bilgili and Siegel (2017) Waldorf (1995)	No significant impact
	Paparusso and Ambrosetti (2017)	Married migrants may be more tied to the destination country
Education	Agadjanian et al. (2014) Anniste and Tammaru (2014)	No significant impact
	de Haas and Fokkema (2011) de Haas et al. (2014) de Vroom and van Tubergen (2014) Paparusso and Ambrosetti (2017)	Higher levels of education attainment have been associated with higher likelihood of willingness to return
	Carling and Pettersen (2014)	Migrants with very low or very high levels of education have the lowest odds of intending to return

Table 1. Impacts of demographic characteristics of migrants on return intentions

Destination country	Vietnamese in 2	migrant stock 2015	Vietname stock in	Weighting factors	
	Count	Percentage	Count	Percentage	
North America					
Canada	168,212	7.50%	13	8.18%	134
United States of America	1,300,575	57.97%	36	22.64%	373
Europe					
Belgium	8,206	0.37%	1	0.63%	85
Czech Republic	45,525	2.03%	1	0.63%	470
Denmark	10,935	0.49%	1	0.63%	113
Finland	7,438	0.33%	1	0.63%	77
France	130,894	5.83%	6	3.77%	225
Germany	95,221	4.24%	2	1.26%	492
Italy	5,295	0.24%	1	0.63%	55
The Netherlands	13,600	0.61%	4	2.52%	35
Norway	13,835	0.62%	2	1.26%	71
Poland	2,792	0.12%	1	0.63%	29
Spain	1,634	0.07%	1	0.63%	17
Sweden	17,085	0.76%	1	0.63%	176
United Kingdom	33,291	1.48%	1	0.63%	344
Asia and Oceania					
Australia	235,590	10.50%	17	10.69%	143
Japan	146,956	6.55%	4	2.52%	379
New Zealand	6,393	0.28%	66	41.51%	1
Total	2,243,477	100%	159	100%	23,165

Table 2. Distribution of Vietnamese diaspora and weighting factors

Note. Vietnamese migrant stock in the world in 2015 was calculated by United Nations, Department of Economic and Social Affairs, Population Division (2019). The total stock of 2,243,477 Vietnamese migrants in the 18 destination countries accounts for 90.7% of the total Vietnamese migrant stock in the world in 2015.

	Sample Weighted Observations Observations		Unweighted number with return intention	Unweighted Percentage	Weighted Percentage
Total	159	23,165	27	16.98	18.27
Gender					
Male	82	12,235	19	23.17	25.82
Female	77	10,930	8	10.39	9.82
Marital status					
Married or in a long-term relationship	111	16,253	16	14.41	18.18
Otherwise	48	6,912	11	22.92	18.49
Education					
Postgraduate	75	13,325	15	20.00	23.20
Otherwise	84	9,840	12	14.29	11.59
Region of destination country					
North America	49	15,170	6	12.24	13.18
Europe	23	3,982	7	30.43	33.17
Asia and Oceania	87	4,013	14	16.09	22.73

Table 3. Descriptive statistics for categorical variables and regions of destination country

Note. 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.

	Min	Max	Unweighted mean	Weighted mean	Difference in weighted mean between return intention "Yes" and "No, not sure, or have not thought about it"
Age	21	75	39.29	40.83	7.96
-			(0.89)	(0.89)	(0.20)
Duration of stay	1	54	12.91	14.95	7.70
-			(0.90)	(0.90)	(0.21)
Integration	-3.9	2.63	0.00	0.09	0.14
			(0.14)	(0.14)	(0.03)
Ties	-2.24	4.12	0.00	0.02	1.21
			(0.11)	(0.11)	(0.02)
VA	-5.3	3	0.00	0.26	-1.64*
			(0.20)	(0.20)	(0.04)
PV	-4.94	2.55	0.00	0.14	-0.73
			(0.16)	(0.16)	(0.03)
GE	-5.25	1.81	0.00	-0.03	-1.14
			(0.15)	(0.15)	(0.03)
RQ	-3.79	2.28	0.00	0.24	-0.60
			(0.15)	(0.15)	(0.03)
RL	-4.92	2.2	0.00	0.19	-1.21
			(0.17)	(0.17)	(0.04)
CC	-4.5	1.98	0.00	0.05	-1.01
			(0.15)	(0.15)	(0.03)
Q	-11.73	5.68	0.00	0.36	-2.65
			(0.35)	(0.35)	(0.08)
PDIQ	-26	30	22.81	23.78	-1.48
			(0.57)	(0.57)	(0.09)

Table 4. Descriptive statistics for continuous variables

Note. Standard errors are reported in parentheses. The acronyms are the first principal components indicating the importance of different dimensions of institutional quality in Vietnam 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 importance. Values of integration, ties and institutional quality measures have been demeaned in the unweighted sample. PDIQ is an index of the perceived difference in institutional quality between the destination country and Vietnam. A positive value indicates that the destination country is perceived to have the higher institutional quality. Using weighted regression, all differences are statistically significant at the 1% level.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Different dimensions of institutional quality		VA	PV	GE	RQ	RL	CC	Q
Age	1.058*	1.058*	1.063***	1.070**	1.067**	1.064***	1.067***	1.067***
	(0.034)	(0.031)	(0.019)	(0.029)	(0.028)	(0.022)	(0.020)	(0.022)
Gender	2.165	2.020	2.075	3.632	2.825	2.364	2.338	2.429
	(3.542)	(3.532)	(3.040)	(5.210)	(3.689)	(2.912)	(2.836)	(3.023)
Marital status	0.382***	0.376***	0.294*	0.198***	0.237***	0.285***	0.277**	0.260***
	(0.129)	(0.110)	(0.209)	(0.056)	(0.072)	(0.136)	(0.139)	(0.129)
Education	2.368***	2.468***	2.446***	2.656***	2.487***	2.429***	2.525***	2.580***
	(0.674)	(0.648)	(0.534)	(0.655)	(0.712)	(0.553)	(0.610)	(0.612)
Duration of stay	1.019	1.017	1.006	1.013	1.011	1.015	1.015	1.012
	(0.036)	(0.030)	(0.009)	(0.032)	(0.030)	(0.030)	(0.028)	(0.026)
Integration	0.814	0.841***	0.874***	0.808	0.847	0.843	0.858*	0.862
	(0.124)	(0.056)	(0.043)	(0.121)	(0.124)	(0.109)	(0.080)	(0.093)
Ties	1.763***	1.731***	1.750***	1.778***	1.824***	1.765***	1.754***	1.752***
	(0.277)	(0.193)	(0.243)	(0.192)	(0.240)	(0.245)	(0.235)	(0.226)
PDIQ	0.894	0.883*	0.875***	0.821***	0.840***	0.837***	0.820***	0.829***
	(0.095)	(0.062)	(0.031)	(0.044)	(0.037)	(0.009)	(0.032)	(0.006)
[PDIQ]x[The importance of institutional quality]		0.983	0.946	0.948***	0.950***	0.970	0.961	0.979
		(0.050)	(0.111)	(0.011)	(0.012)	(0.033)	(0.044)	(0.018)
N	23165	23165	23165	23165	23165	23165	23165	23165
Log pseudo-likelihood	-7838	-7809	-7674	-7250	-7437	-7635	-7581	-7523
McFadden pseudo R ²	0.288	0.291	0.303	0.342	0.325	0.307	0.312	0.317

Table 5. Estimates of weighted logit regression models of the intention to return to Vietnam

Notes. The dependent variable is a dichotomous indicator of whether or not a respondent intends to return to Vietnam for a period of at least 12 months. PDIQ refers to the perceived difference in institutional quality between the destination country and Vietnam. A positive value of PDIQ indicates that the destination country is perceived to have the higher institutional quality. The table displays exponentiated coefficients, i.e. odds ratios. Coefficients of dummy variables indicating imputed data are not reported. Regression error terms are assumed clustered by three regions of current destination country (North America, Europe, and Asia & Oceania). Standard errors of coefficients are reported in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

	(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
	Males							Females						
Age	1.528**	1.506***	1.494***	1.498***	1.582***	1.664	1.585*	1.024	1.030	1.001	1.006	1.008	1.042	1.021
	(0.294)	(0.127)	(0.169)	(0.102)	(0.173)	(0.566)	(0.375)	(0.053)	(0.040)	(0.046)	(0.031)	(0.038)	(0.029)	(0.029)
Marital status	0.000**	0.000 * * *	0.000***	0.000***	0.000***	0.000	0.000**	0.091***	0.094***	0.132***	0.127***	0.117***	0.091***	0.107***
	(0.001)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.044)	(0.025)	(0.055)	(0.035)	(0.007)	(0.045)	(0.030)
Education	0.889	0.480	0.482*	0.369	0.293	0.284	0.468	8.851**	4.067***	2.833*	2.225**	3.253***	11.406***	5.152***
	(0.545)	(0.658)	(0.203)	(0.279)	(0.235)	(0.245)	(0.344)	(7.570)	(0.335)	(1.685)	(0.834)	(0.332)	(10.243)	(1.941)
Duration of stay	0.897***	0.882***	0.901***	0.891***	0.873***	0.861**	0.873***	0.908**	0.923	0.964	0.970	0.954	0.899	0.937
	(0.024)	(0.038)	(0.023)	(0.031)	(0.027)	(0.063)	(0.042)	(0.038)	(0.075)	(0.039)	(0.061)	(0.068)	(0.125)	(0.095)
Social integration	1.236	1.227	1.140	1.134	1.265	2.007	1.261	1.703***	1.864***	1.697*	1.887**	1.818**	2.252**	2.015***
	(0.442)	(0.294)	(0.328)	(0.310)	(0.563)	(1.732)	(0.503)	(0.212)	(0.165)	(0.475)	(0.601)	(0.425)	(0.834)	(0.476)
Structural integration	0.112	0.148**	0.136**	0.146***	0.118**	0.070	0.108	0.938	0.776	0.639*	0.595*	0.638	0.618	0.632
	(0.164)	(0.111)	(0.123)	(0.107)	(0.124)	(0.182)	(0.190)	(0.059)	(0.288)	(0.161)	(0.159)	(0.179)	(0.267)	(0.271)
Social ties	22.650	24.677*	20.845*	20.361**	33.384**	58.207	33.121	0.543	0.746	0.794	0.809	0.741	0.570*	0.659
	(51.806)	(43.994)	(34.678)	(25.831)	(55.004)	(204.797)	(84.256)	(0.335)	(0.299)	(0.307)	(0.249)	(0.223)	(0.181)	(0.220)
Economic ties	5.655*	8.328	8.051*	10.679**	17.001***	19.871***	11.054***	0.550	0.478	0.754	0.805	0.698	0.604	0.626
	(5.642)	(13.115)	(9.589)	(12.392)	(6.582)	(16.099)	(3.984)	(0.539)	(0.505)	(0.559)	(0.632)	(0.504)	(0.498)	(0.540)
PDIQ	0.797***	0.851***	0.759***	0.790***	0.796	0.801***	0.797***	0.713*	0.738	0.812	0.788	0.759*	0.668**	0.724**
	(0.048)	(0.037)	(0.008)	(0.060)	(0.156)	(0.005)	(0.057)	(0.129)	(0.139)	(0.140)	(0.126)	(0.116)	(0.109)	(0.116)
[PDIQ]x[The importance	0.865***	0.839*	0.931	0.929	0.809	0.636	0.900	0.921**	0.886***	0.962	0.924	0.964	0.895**	0.957**
of institutional quality]	(0.041)	(0.085)	(0.046)	(0.067)	(0.255)	(0.401)	(0.151)	(0.033)	(0.013)	(0.101)	(0.078)	(0.033)	(0.046)	(0.018)
N	12235	12235	12235	12235	12235	12235	12235	10930	10930	10930	10930	10930	10930	10930
Log pseudo-likelihood	-2492	-2475	-2534	-2530	-2365	-2333	-2396	-2316	-2213	-2388	-2332	-2342	-2251	-2281
McFadden pseudo R ²	0.643	0.646	0.637	0.638	0.662	0.666	0.657	0.340	0.369	0.320	0.335	0.333	0.359	0.350

Table 6. Estimates of weighted logit regression models of the intention to return to Vietnam, by gender

Notes. The dependent variable is a dichotomous indicator of whether or not a respondent intends to return to Vietnam for a period of at least 12 months. PDIQ refers to the perceived difference in institutional quality between the destination country and Vietnam. A positive value of PDIQ indicates that the destination country is perceived to have the higher institutional quality. The table displays exponentiated coefficients, i.e. odds ratios. Regression error terms are assumed clustered by three regions of current destination country (North America, Europe, and Asia & Oceania). Standard errors of coefficients are reported in parentheses. * p<0.1, ** p<0.05, *** p<0.01.