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Do Employers Value Return Migrants? An Experiment on the Returns to Foreign Work Experience

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ABSTRACT

Return migrants who have worked abroad are a potentially important source of human capital for employers in migrant-sending countries. Yet, to date, the value of the foreign work experience that they bring to the local labor market remains poorly understood. What is the demand for return migrants among employers in a country where almost 11 percent of its workers leave for abroad? I conduct an audit study in the Philippines, sending over 8,000 fictitious resumes in response to online job postings across multiple occupations. Resumes were randomly assigned varying lengths of foreign work experience, among other things. Employers appear to disfavor return migrants: Workers with foreign experience receive 12 percent fewer callbacks than non-migrants, with callback rates even lower for those who spent a longer time abroad. I test possible explanations and find that, consistent with employer interviews, location-specific human capital is important to employers, and the value of this human capital deteriorates as a worker spends time away from the domestic economy.

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I. INTRODUCTION

With more than 232 million individuals living outside their countries of birth,[1] return migration is a potentially large phenomenon. Experts often cite "brain gain" as its chief benefit: Migrants bring back not only their original human capital but also new skills, social connections, and experience acquired in foreign countries.[2] But whether domestic employers value foreign work experience in production processes at home is unclear. Skills learned abroad may be irrelevant. Worse, absence from the local labor market could be detrimental if the skills employers value depreciate as a migrant spends time abroad. To what extent do employers value the foreign work experience of a returning migrant?

This paper describes an audit study conducted in the Philippines, in which more than 8,000 fictitious resumes were sent in response to online job ads. The experimental approach is akin to resume-audit studies now standard in labor economics. The resumes included descriptions of typical Filipino workers with similar backgrounds but I randomly varied them to indicate different lengths of foreign work experience. Low- and high-skill employment ads were targeted in sales, administrative, construction, finance, and information technology (IT) job categories. Callbacks for an interview received from employers were recorded for each resume. Because foreign work experience was randomly assigned across resumes, the basic analysis compares callback rates between those who had varying work experience abroad with those with only domestic work experience. This approach provides a causal estimate of the value of foreign work experience, as perceived by home-country employers.

The main finding is that employers do not appear to value work experience abroad; rather, they seem wary of it. Job applications with foreign work experience receive 12 percent fewer callbacks than otherwise identical job applications (2.8 percentage points of the mean callback rate of 24 percent). In addition, the callback rate appears to decrease for workers who spend a longer time abroad than in the home country. A variety of regression specifications confirm the robustness of these results, and the negative effect is consistent across industries. The results persist with subsamples of only high- or low-skilled job applicants. Employers disfavor return migrants compared to non-migrants with comparable skill, experience, and educational background.

I consider potential explanations for why employers might not prefer return migrants. I exploit how declared expected salary, the quality of resumes, and cover letters were explicitly varied among job applications, to distinguish among the various explanations. Evidence shows that the following factors play at best a minor role: First, that employers perceive return migration to be a negative signal, indicating negative selection into migration or failure abroad; second, that employers believe return migrants demand high wages; third, that employers think

[1] http://esa.un.org/unmigration/documents/The_number_of_international_migrants.pdf [accessed Jan. 2, 2015]

[2] Numerous policy reports on international migration mention these benefits of return migration. See for example this report by the UN Secretary-General on International Migration and Development [http://www.refworld.org/docid/44ca2d934.html, accessed Jan. 6, 2015] See also International Organization for Migration (2008) and Dayton-Johnson et al. (2009).

return migrants are overqualified; and fourth, that employers believe return migrants have high job turnover rates.

A fifth possible explanation, the depreciation of location-specific human capital, appears most plausible. Employers value workers who have experience in local production processes. But the value of this location-specific human capital deteriorates as workers spend time away from the local economy. Suggestive evidence from a sub-experiment supports this claim, showing that return migrants experience better outcomes once they have spent time working again in the domestic economy, after their return. Moreover, human resources (HR) personnel corroborate this finding in interviews, a number of them sharing that the longer an overseas worker works abroad, the harder it is to adjust with the local work culture and environment.

Such findings stand in contrast to prior work done by other researchers, who have generally found large but varied labor market returns associated with return migration. Past empirical work measures the wage premium enjoyed by return migrants. Estimates of the wage premium range from 0 to 40 percent in studies comparing wages of return migrants to those of non-migrants in survey data. Part of the variation can be explained by differences in the contexts in which these studies were conducted. However, these estimates also present difficulty in accounting for potential selection biases. Return migrants may be positively selected out of traits employers may also value. It is difficult to determine whether the higher wages of return migrants arise out of the real effect of foreign work experience or from some other characteristic the migrants possess that an employer observes but a researcher cannot control for. In the context of international migration, Gibson et al. (2013) highlight how the selection bias is exacerbated by a "triple-selectivity problem"[3]: there is selection on who migrates; who returns among those who migrate; and who, among those who return, participates in wage employment. Selection bias may explain why estimates of the wage premium vary from study to study. Although this resume-audit study does not include an estimate of a wage premium, the approach deals with the selection problem by comparing outcomes associated with foreign work experience in otherwise identical workers.

In the end, this study's results cast doubt on the view that foreign work experience is the main channel through which return migrants produce gains for the home country. Other channels exist, of course, through which return migrants might bring value to the origin country: through their foreign education, their savings earned abroad, their entrepreneurial mindset, or their increased expectations of better political institutions at home. The focus here on work experience and domestic employers though is relevant to the extent that labor migration characterizes most of international migration. For example, most working-age immigrants in Organization for Co-operation and Development (OECD) countries are employed; the average employment rate of the immigrant population aged 15 to 64 is 64 percent, only slightly lower than that of native-born residents (OECD 2014). Temporary labor migration programs are commonplace all over the world, and under such schemes, receiving countries impose time-limited contracts on foreign workers that strictly enforce return to origin countries.

[3] Gibson et al. (2013) use the term "triple-selectivity problem" in a slightly different context, but their insight about the selection problem in migration applies here.

This study offers an alternative perspective to the design of return migration programs. Providing generous financial incentives to entice nationals living abroad to come home has often been the focus of such programs. But my results suggest that efforts to reintegrate returning migrant workers, to help ease them back into the workforce in the origin country, may deserve attention. Such attention may be especially prudent in the Philippines, which participates in numerous temporary labor migration programs with other countries. Because the Philippine migration system is often seen as a model worldwide, this study's results would interest government leaders of other migrant-sending countries who seek to engage in active labor-force migration and circulation.

II. BACKGROUND

This section (1) describes the existing literature on the returns to foreign work experience, (2) provides a brief background on resume-audit studies, and (3) argues that the Philippines is an excellent setting in which to conduct an audit study on the value of foreign work experience. Though resume-audit studies have their weaknesses, the approach overcomes the selection problem often insufficiently addressed in past non-experimental studies of return migration.

The wage premium to return migrants

The literature on return migration typically emphasizes the accumulation of human capital abroad as the main channel through which a migrant contributes to her home country upon return. A migrant acquires new skills and connections and increases her productivity by working abroad, which makes her valuable upon return. Dustmann, Fadlon, and Weiss (2011) present a formal theoretical model underpinning this argument.

Researchers have tested this model of human capital accumulation in empirical studies, but focus on estimating the wage premium by using non-experimental data to compare the wage paid return migrants to those paid similar individuals who have never migrated. The findings vary considerably from study to study. Co et al. (2000), for example, find there was a large wage premium (40 percent) for returning migrant women in Hungary but find none for men. In contrast, Barrett and Goggin (2010) estimate that male Irish returnees earn 7 percent more than comparable stayers, but not their female counterparts. Reinhold and Thom (2013) find that for every year of experience in the United States, earnings increased by approximately 2.2 percent for migrants who return to Mexico. Findings vary partly because the studies were done in different contexts.

An important limitation of such studies, however, is the difficulty of sufficiently controlling for selection on unobserved characteristics relevant to the labor market. Migrants are not randomly drawn from the home country population and neither are return migrants from the current stock of the diaspora. A further complication is that migrants who return may select into wage employment on the basis of certain characteristics unobserved by the researcher. If return migrants appear similar to non-migrants in a researcher's data but look different to employers, then factors unseen to the researcher may account for the difference in observed wages between the two groups, and not foreign experience (Gibson et al. 2013). Even the direction of the resulting bias is difficult to identify.

The aforementioned researchers try to account for the selection problem by modeling selection decisions but rely on possibly restrictive assumptions. The typical approach involves estimating a bivariate normal selection model in the spirit of Heckman (1979). For example, Co et al. (2000) estimate participation in employment or migration by using variables such as age, marital status, and place of residence at age 14. Barrett and Goggin (2010) use the unemployment rate in an individual's county of residence at the time of graduation to explain selection into migration. It is questionable, however, whether these variables satisfy the exclusion restriction necessary for such models to hold. Though age, marital status, and place of residence explain migration or employment, they are factors likely related to a person's wages as well as to other characteristics. This audit study offers an alternative way to confront the triple-selectivity problem by experimentally varying overseas experience in otherwise identical resumes.

Resume-audit studies in labor economics

The experimental setup in this paper closely follows the design of a long list of past audit studies in labor economics. The setup's key advantage is that the researcher is able to control everything that employers observe about job applicants in generated resumes. Therefore, differences in resume outcomes—typically, callback rates—can be credibly attributed to an experimental variable, holding other things constant by randomization. Researchers have examined a rich set of topics with this design. To name a few, Bertrand and Mullainathan (2004), Oreopoulous (2011), and Booth et al. (2012) investigated the effect of race on employment outcomes; Kroft et al. (2013) and Eriksson and Rooth (2014) looked at the adverse effect of unemployment spells on outcomes; and Deming et al. (2016) focused on the value of postsecondary credentials in the labor market. The innovation in my paper is in applying the method to focus on foreign work experience.

Some disadvantages to the approach, however, are worth mentioning.[4] One disadvantage of resume-audit studies is that interview callback rates are the measured outcome, instead of actual job offers or wages. If rates of actual job offers are the reverse of interview callback rates, then the callback results could be misleading. Second, the measured effect may indicate only employers' perceptions about job applicants. If employers' beliefs are erroneous, then differences in the rates of callbacks may not necessarily reflect true differences in worker productivity. Third, disparities in interview rates, however accurately measured, may not be large enough to translate into meaningful differences in economic outcomes among workers.

Nevertheless, resume-audit studies provide a good window into the workings of the labor market. Although only interview callback rates are measured in this study, callback rates are found empirically to map directly to job offer rates, at least for in-person audit studies in the United States (Mincy 1993). Whereas employer perceptions may be mistaken, incorrect beliefs are unlikely to persist in labor markets over time, in a competitive market (Aigner and Cain

[4] The disadvantages of audit studies in the context of discrimination studies listed by Heckman and Siegelman (1993) and Heckman (1998) are perhaps the best known, although most of their critique applies to audit-pair studies that use actors standing in as "live" job applicants in interviews. Resume-audit studies, which rely on sending fictitious resumes only, overcome some of the limitations these authors mentioned, but they are still subject to a number of weaknesses.

1977). Especially if decisions made by employers are based on previous experience working with similar workers, employer perceptions can reflect true productivity differences between workers. Although interview callback rates may not be seen as economically meaningful, a study by Lanning (2013) demonstrates that even seemingly small differences in hiring rates can lead to nontrivial wage gaps when a search model is calibrated using data from well-known audit studies.

To my knowledge, only one other study has used a resume-audit methodology to investigate the demand for return migrants. Wah (2015) conducted a field experiment in Myanmar to examine employers' perceptions of foreign versus local experience. He found no systematic or significant difference in callback rates between foreign and local applicants, although foreign work experience appears to be preferred by employers in some small subgroups.[5] This study, in the same spirit, concludes that employers generally do not prefer foreign over local work experience. The difference however is in this study's random assignment of length of foreign work experience (apart from incidence of work abroad) and the expected wages of applicants, among other resume characteristics. These factors allow testing for possible explanations of why employers might not prefer returning migrants over local workers. One finding is that it is not primarily the location of work experience that employers disfavor but the length of time a worker has spent abroad.

The Philippines as an excellent setting

The Philippines provides an excellent laboratory in which to study migration. Home to an estimated 10,489,628 migrants around the world,[6] the country is one of the largest migrant-sending nations in the world, with almost 11 percent of its population abroad. International labor migration has had a long history in the country. Since 1974, the Philippine government has facilitated and promoted temporary overseas employment. Rough estimates suggest that there are more than 3.5 to 4.5 million return migrants in the country (Wahba 2015). Given how commonplace departure and return is, employers are unlikely to find it strange to receive job applications from workers with foreign experience. The setting reduces the possibility that the experiment's results are based on mistaken perceptions of employers who had had little experience with return migrants. In addition, this research contributes to the literature by providing a good estimate of the demand for foreign experience in a setting where return migration is a relevant issue, where migrants abroad constitute a significant share of the workforce.

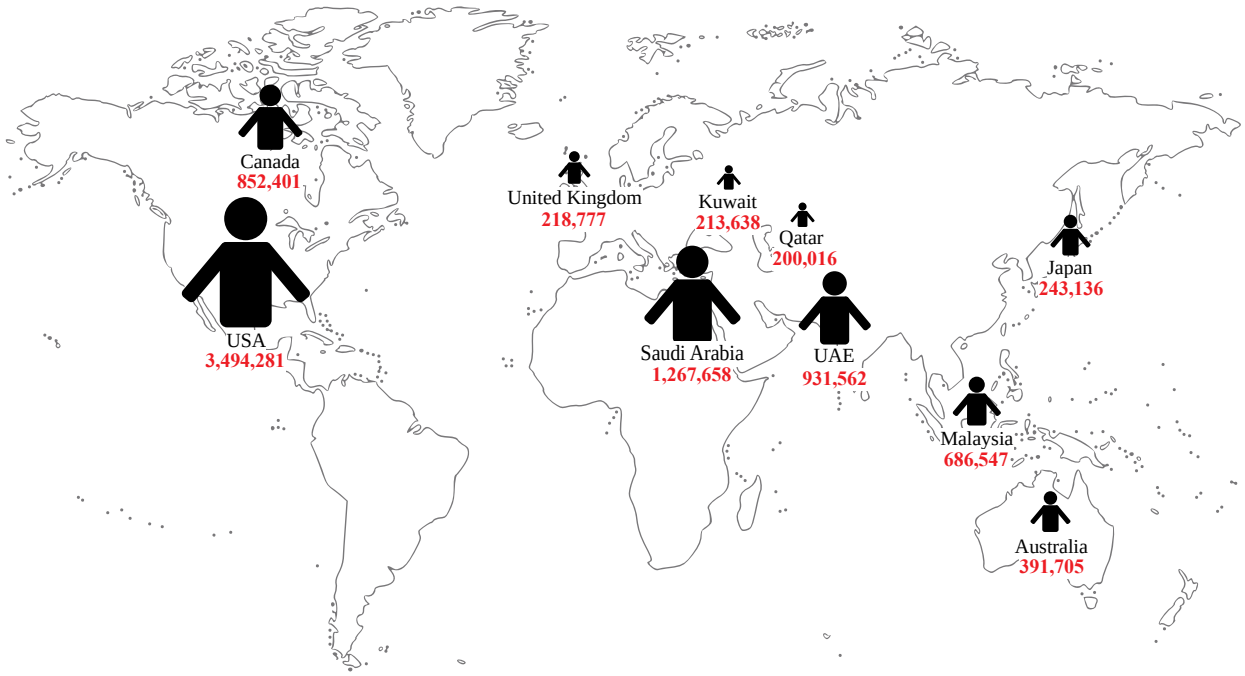
The design of this study reflects the tendency of Filipinos to migrate to a diverse set of countries. Figure 1 portrays the spread of Filipino migrants among the top 10 destination countries in 2012, and Table 1 provides the numbers by migration category. The United States is a major destination, hosting more than 40 percent of the stock of total migrants, with most migrants recorded under the permanent category (that is, with visas allowing indefinite stay). Permanent migration is most prominent to western countries like the United States, Canada,

[5] Specifically, software developers and programmers with foreign experience in Singapore were highly favored by foreign employers in Myanmar.

[6] From the Commission on Overseas Filipinos (2012) Stock Estimates.

Australia, and the United Kingdom. On the other hand, temporary migration garners a significant share as well. This term refers to legal migration often facilitated by the government through licensed recruitment agencies. Workers go abroad with contracts of specified lengths, typically two years, with the potential for renewal (Theoharides 2016). Middle East countries such as Saudi Arabia and the United Arab Emirates are the main destinations. Also popular are countries neighboring the Philippines, such as Malaysia, Hong Kong, and Singapore. Finally, irregular migration is estimated to be the least common. Irregular migrants refers to migrants without valid residence or work permits in the foreign country or who are overstaying their visa. The Philippine government estimates irregular migrants to constitute around 13 percent of the stock of overseas Filipinos. In this audit study, resumes with foreign experience were randomly assigned foreign countries in a way that mimics the distribution of the stock in migrant destinations.[7]

Figure 1. A global mapping of the estimated stock of overseas Filipinos (Top 10 destination countries)



Source: Data are from the Commission on Filipinos Overseas, 2012 Stock Estimates

[7] An alternative would have been to randomly assign countries in a way that mimics the distribution of countries that migrants return from, but there was no reliable source for that data. In any case, the stock of migrants in destination countries is likely to be correlated with the number of migrants who return from these countries.

Table 1. Top 10 countries of destination of permanent, temporary, and irregular migrants in 2012

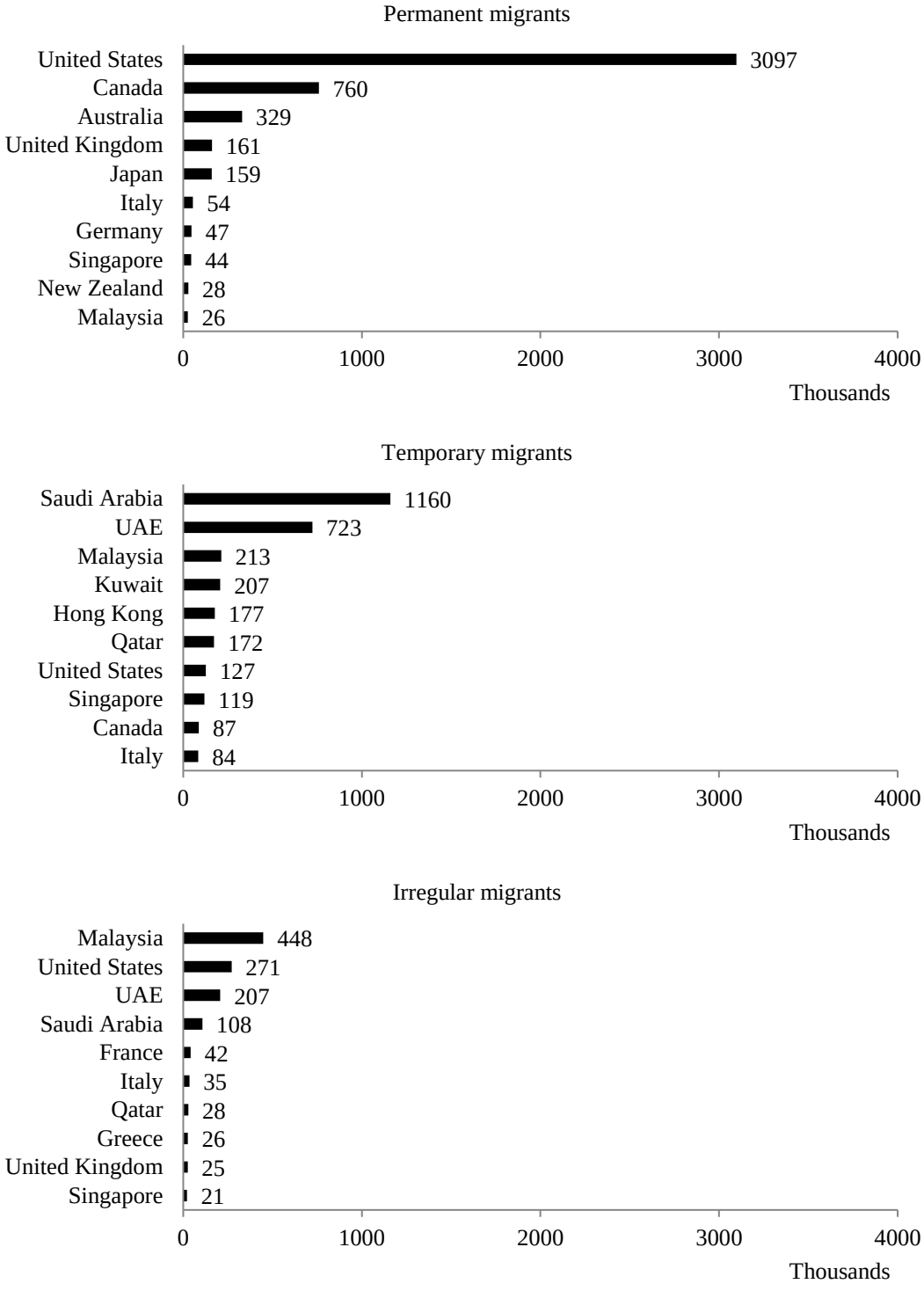


Table 1 (*continued*)

Source: Data are from the Commission on Filipinos Overseas, 2012 Stock Estimates

Notes: The figure provides stock estimates of the number of Filipino migrants distributed among the top 10 destinations, broken down by type of migration. Permanent migrants are those with visas that allow indefinite stay in the destination country. Temporary migrants are workers whose stay abroad is regulated by contracts with specified lengths. Irregular migrants refer to those abroad without valid residence or work permits.

The fact that Filipinos work in a variety of jobs abroad informed the selection of the five job categories considered in this study. Table 2 presents the distribution of migrant workers by major occupation group, as taken from the 2013 Survey of Overseas Filipinos.[8] Occupations considered highly skilled (managers, professionals, and technicians) represent a fair amount of workers, and lesser-skilled positions (clerks, sales workers, and laborers) are sizeable as well. This study reflected this distribution by considering construction, finance, IT, sales, and administrative job categories, the first three representing jobs with high skill requirements. Although not fully representative of occupations taken up abroad by Filipinos, the five categories comprise some of the most in-demand occupations in the Philippines, representing the highest number of job postings per month in the job websites considered in this audit study.[9] It was necessary to select job categories with a high frequency of new job openings, to send a sufficient number of resumes in a given period.

Table 2. Distribution of overseas Filipino workers (percentages) by major occupation group and sex, in 2013

Major occupation group	Total	Male	Female
Managers	3.5	5.2	1.9
Professionals	11.6	10.1	13.1
Technicians and associate professionals	7.6	11.1	4.1
Clerks	5.2	3.1	7.3
Service workers, shop, and market sales workers	16.7	13.6	19.8
Farmers, forestry workers and fishermen	-	-	-
Trades and related workers	12.9	25.1	0.6
Plant and machine operators and assemblers	11.7	21.5	1.7
Laborers and unskilled workers	30.8	10.4	51.4
Total	**100**	**100**	**100**
Number of workers in thousands	**2,295**	**1,154**	**1,141**

Source: Data are taken from the 2013 Survey of Overseas Filipinos

Note: The estimates cover overseas Filipinos whose departure occurred within the last five years and who are working or had worked abroad during the past six months of the survey period.

[8] The Survey of Overseas Filipinos is a nationally representative survey conducted annually by the National Statistics Office. The survey interviews migrant households in the Philippines and gathers information on family members who have gone abroad and their remittances, occupations, and places of work, among other things.

[9] The Bureau of Local Employment lists accountants, civil engineers, programmers, and sales clerks as some of the most in-demand occupations in the Philippines. <http://www.ble.dole.gov.ph/pjf/2013-2020In-demandandHard-to-fillOccupations.pdf, accessed Jan. 8, 2014>

III. EXPERIMENTAL DESIGN

This section describes in greater detail the experimental design implemented by the research team—how we created a bank of work experiences to use in generating fictitious resumes, chose job ads to apply to, randomly assigned foreign work experience among resumes, and responded to job ads and recorded interview callbacks.

In total, we sent more than 8,000 resumes in response to 2,000 job ads in metropolitan Manila (Metro Manila) over the course of 6 months. The pilot study was done in April 2014 and the full study was implemented from June to September 2014. None of the steps changed between the pilot and full study, except, in the full study, we automated parts of the procedure.[10]

Creating a bank of work experiences

We began by building a repository of work experiences that served to represent employment experiences of actual Filipino job seekers. We gathered resumes from job websites for individuals looking for work in our selected industries. To avoid compromising current job seekers, we collected resumes that had been posted more than three years ago. We extracted information on company names, job titles, and job responsibilities and used these as a basis for crafting fictitious resumes.

Choosing job ads and generating fictitious resumes

We used two of the most popular job websites in the country and considered all employment ads falling under the sales, administrative, construction, finance, and IT job categories. We restricted ourselves to jobs in the National Capital Region, ignoring ads from companies that conceal their identity and ads that are associated with staffing agencies that recruit workers for other employers.

For each job ad, we made four resumes and web profiles in the associated job website. Care was taken to make resumes distinct from one another, to avoid suspicion from employers. Filipino names were randomly selected from a list of common names taken from the Census. Postal addresses were randomly assigned using real streets in Metro Manila taken from the phone book. Each profile was given a unique email address. We based resume templates on 15 different designs, for variation.

We tailored resumes to satisfy minimum job requirements listed by the job ad. We constructed distinct work histories by building from our bank of work experiences, indicating technical skills where necessary. Work histories always indicated experience relevant to the job posting. For example, if the posting was for a sales position, resumes all indicated past positions in sales, marketing, or retail.

We randomized key elements in the four resumes per job ad:

[10] The University of Michigan Institutional Review Board reviewed the design of the study and determined it to be "not-regulated" (HUM00083981).

1. **Gender**. For each job in the sales, finance, and IT job categories, we randomly assigned two applicants to be male and two female. For administrative positions, we made all applicants female. For construction jobs, we made all applicants male. Females and males, respectively, overwhelmingly hold these latter two positions.
2. **Quality**. We assigned two resumes to be high quality and the other two to be low quality. Although all resumes were tailored to match minimum job requirements, high quality resumes were designed to be superior. First, high quality resumes listed one of the top four universities in the Philippines as their alma mater. Low quality resumes were assigned a random college or university drawn from all but the top four.[11] Second, in high quality resumes, we included relevant technical skills beyond requirements. For example, if an engineering position required proficiency in AutoCAD, high quality resumes were designated to have additional skills in Primavera or Staad Pro and low quality resumes indicated only AutoCAD. Last, high quality resumes were constructed to have two more years of work experience than low quality resumes.
3. **Expected Salary**. The job websites we used allowed a job applicant to declare an expected salary for the position being applied for. They also allowed a company to reveal a salary range for the job they are hiring for. We randomized the expected salary indicated in our four job applications to be within the salary range indicated by the job ad. If a company declared no salary range, we made an estimate of the appropriate range.

Research assistants were allowed to choose the total number of jobs held for the four resumes, provided that it was equal for the pair of low quality resumes and for the pair of high quality resumes. Total years of experience were based on the minimum years required by the job. As mentioned, low quality resumes received the minimum and high quality resumes received two additional years (however, these would be adjusted again after the assignment of years of foreign work experience). We designed all resumes to have no unemployment spells. The age of each applicant was determined by years of work experience plus 21 years.

Random assignment of foreign experience

Once the set of resumes was prepared, we randomly assigned two of the four resumes—one low quality and one high quality—to include foreign work experience. We modified these resumes to include a recent work experience abroad. The added work experience is for an occupation in the same industry as indicated in the job ad. Typically, we changed the details of the last job held or added another job to the work history using our bank of work experiences. We used real foreign company names obtained via Internet searches.

For the two foreign resumes, we randomized length of foreign work experience in years according to a discrete, uniform distribution on the interval [1,10]. Country of foreign experience was randomly chosen with probabilities based on the current distribution of the top 15 destinations for Filipino migrants. Table 3 shows the distribution in our resumes of foreign countries where experience was obtained. By design, it matches the locational distribution of current Philippine migrants.

[11] For a full list of universities used, please refer to Table A1 of the appendix.

Table 3. Countries of foreign experience of resumes in the audit study

Country	Frequency	Percent (%)
USA	1,413	38.0
Saudi Arabia	521	14.0
UAE	378	10.2
Malaysia	332	8.9
Canada	318	8.6
Australia	131	3.5
UK	114	3.1
Kuwait	99	2.7
Qatar	78	2.1
Japan	76	2.0
Singapore	66	1.8
Hong Kong	62	1.7
Italy	49	1.3
South Korea	42	1.1
Taiwan	40	1.1

Note: The table presents the distribution of countries where foreign experience was obtained among resumes in the experiment.

The two remaining resumes from the set of four served as controls and represented non-migrants. To make these resumes as comparable to the foreign resumes as possible, we adjusted work experience to include the same number of years in local work experience as in foreign and an additional job held, if applicable. For example, if a low quality resume was randomly selected to have six additional years of foreign experience, then we added six years of local experience to its corresponding pair. If a high quality resume showed nine years of foreign work experience, the counterpart resume received nine more years of local experience as well. In this way, total jobs held and total years of work experience were always equal between resumes in each pair. This strategy ensured balance between control and treatment groups (from here on, resumes with foreign work experience are referred to as the "treatment group" and resumes without as the "control group").

Responding to job ads and recording callbacks

We sent the four resumes in random order within a span of two days to each job ad. We then selected another job ad that was as similar as possible in minimum requirements to the original ad and re-sent the four resumes. Thus, each resume was sent to two job ads in total. The idea was to balance statistical power with research cost, owing to the labor-intensiveness of creating resumes. This feature is accounted for later through standard errors clustered at the resume level when performing regression analysis.

We recorded whether applications elicited a callback for an interview; callbacks came in the form of a call or a text message. We used 32 cell phone numbers. Because leaving voice mail is uncommon practice in the Philippines, we did not use a voice mail recording service to receive calls, unlike other audit studies. Instead, research assistants answered phone calls from 9:00 to 6:00 p.m. weekdays. We disregarded phone calls outside this time frame.[12] We considered all

[12] We received a total of 301 missed calls throughout the course of the study. It is likely that employers called again when they could not reach us, although we did not track the extent to which this was done.

text messages, regardless of the time of day they were received. We counted a callback only if an employer explicitly invited an applicant to an interview.[13] All requests for interviews were turned down following a prescribed protocol.

We did not record interview invitations received by email, because this practice appeared rare. In the pilot, we found that whenever employers sent emails, they also eventually sent a corresponding invitation for an interview through text message or phone call. As such, we deemed recording emails unnecessary.[14]

We cleaned our data by removing observations from resumes that we later discovered were unsent. At times, research assistants made errors; other times, job ads were taken down before we were able to send a full set of resumes. There were also instances in which we sent resumes with missing information. We dropped observations associated with such resumes. Our final sample thus included 7,474 observations. We pooled data from both the pilot and the full study.

IV. SUMMARY STATISTICS

Table 4 provides summary statistics of some variables of interest. Panel A describes job ad characteristics in terms of minimum years of required work experience and salary range. Monthly salaries are in Philippine pesos; the average exchange rate in 2014 was around 45 pesos per US dollar. Characteristics varied by industry. Administrative and sales positions offered considerably lower salaries than finance and IT; they also required less experience.

Panel B presents resume characteristics. Though all resumes were initially constructed to show minimum required experience, resumes generally showed more years of experience than what is required by job ads because years of foreign experience were added (and corresponding years of domestic experience for the control resumes).

Twenty-four percent of job applications received a callback from employers. Of these, 68 percent were received via text message and 47 percent via phone calls. The average waiting time for a callback was around eight days, once an application was sent—whether through text message or phone call. Many callbacks occurred within one or two days; 36 percent of callbacks occurred within two days after sending a resume. The median time to wait for a callback from employers was four days.

By design, resume features were similar across foreign and local resumes. To demonstrate, Panel A of Table 5 presents sample means of various resume characteristics by treatment status. None of the resume characteristics differed statistically between treatment and local resumes. The same holds true when looking at subsamples by industry (results not shown). We can be confident that any difference in callback rates between resumes with and without foreign experience was caused by foreign experience.

[13] Almost all callbacks requested an interview. There were rare instances, though, when employers called to ask for supplementary material, such as an applicant's photo, to be submitted.

[14] Monitoring callbacks that were received through email was especially difficult because of anti-bot efforts on the part of email providers.

Table 4. Summary statistics

Panel A: Job ad characteristics

All jobs	Mean	SD	Min	Max
Required minimum years of experience	2.75	2.06	0	15
Min of salary range offered	24,791	13,720	3,000	150,000
Max of salary range offered	35,624	19,871	11,000	300,000

By firm industry	Common job titles	Median min salary (monthly pesos)	Median max salary (monthly pesos)	Median min required experience (yrs)
Administrative	Administrative assistant Executive assistant HR assistant	15,000	22,000	2
Construction	Civil engineer Project engineer Quality surveyor	20,000	30,000	2
Finance	Accountant Accounting manager Finance manager	30,000	40,000	3
Sales	Sales engineer Sales executive Sales representative	15,000	25,000	1
IT	Web developer Java developer Programmer	30,000	40,000	3

Panel B: Resume characteristics

All resumes	Mean	SD	Min	Max
Total years of experience	9.43	3.64	1	24
Total # of jobs held	2.88	0.99	1	7
Expected salary	29,952.10	15,456.15	2,000	190,000

Panel C: Callback rates

By industry	Callback rate
All	24%
Administrative	13%
Construction	30%
Finance	25%
IT	30%
Sales	22%

Table 4 (*continued*)

Manner of callback	Percentage	Frequency
Text message only	53%	952
Mobile callback only	32%	577
Both	15%	269
Total		1798

Days elapsed before first callback	Mean	Median	Min	Max
Text message	8.4	4	0	89
Mobile	8.3	4	0	89

Table 5. Randomization tests

Panel A: Balance between foreign and local resumes

	Sample means		P-value of difference in means
	Local	Foreign	
Quality (high=1, low=0)	0.498	0.502	0.819
Gender (female=1, male=0)	0.493	0.514	0.189
Ln(expected salary)	10.203	10.202	0.930
Order sent	0.497	0.507	0.627
Total years of experience	9.430	9.440	0.933
Total number of jobs held	2.880	2.887	0.989
Observations	3,752	3,722	7,474

Panel B: Balance in resumes with different years of foreign experience

	Dependent variable = Length of foreign work experience		
Gender (female=1, male=0)	0.2006 (0.1586)		
Ln(expected salary)		-0.0931 (0.5284)	
Order sent			0.1675 (0.1226)
Observations	7,474	7,474	7,474

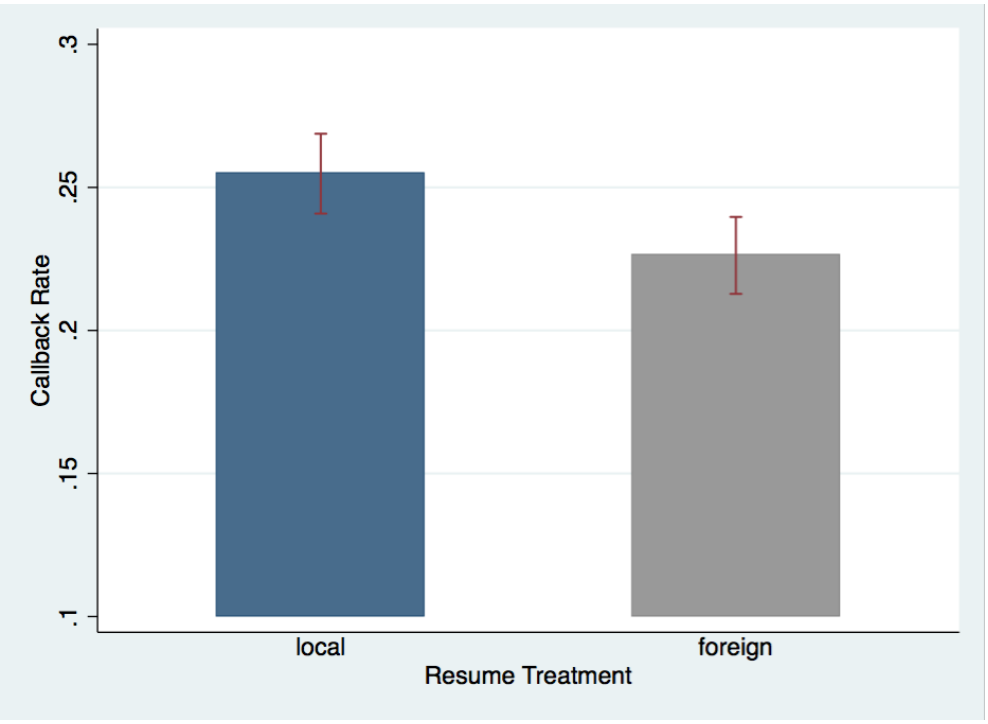
Notes: Panel A reports means of resume characteristics by treatment status (local or foreign) and presents p-values of t-tests of the difference in sample means, accounting for stratification at the job ad level. Panel B presents balance tests among resumes with different years of foreign work experience. Each column is a regression of length of foreign work experience on a resume characteristic, using job ad and quality of resume fixed effects. Panel B presents no regressions with total years of experience and total # of jobs held because by construction, resume pairs within the same job ad and quality of resume have exactly the same total years of experience and total # of jobs held. *** p<0.01, ** p<0.05, * p<0.1

Similarly, resume characteristics were balanced across resumes with different years of foreign experience. Panel B of Table 5 presents simple regressions of length of foreign work experience on resume characteristics. All regressions employed fixed effects by job ad and quality of resume, consistent with the succeeding analysis. (The succeeding section also explains why this specification might be necessary.) Again, characteristics were similar across resumes with different years of foreign experience.

V. RESULTS

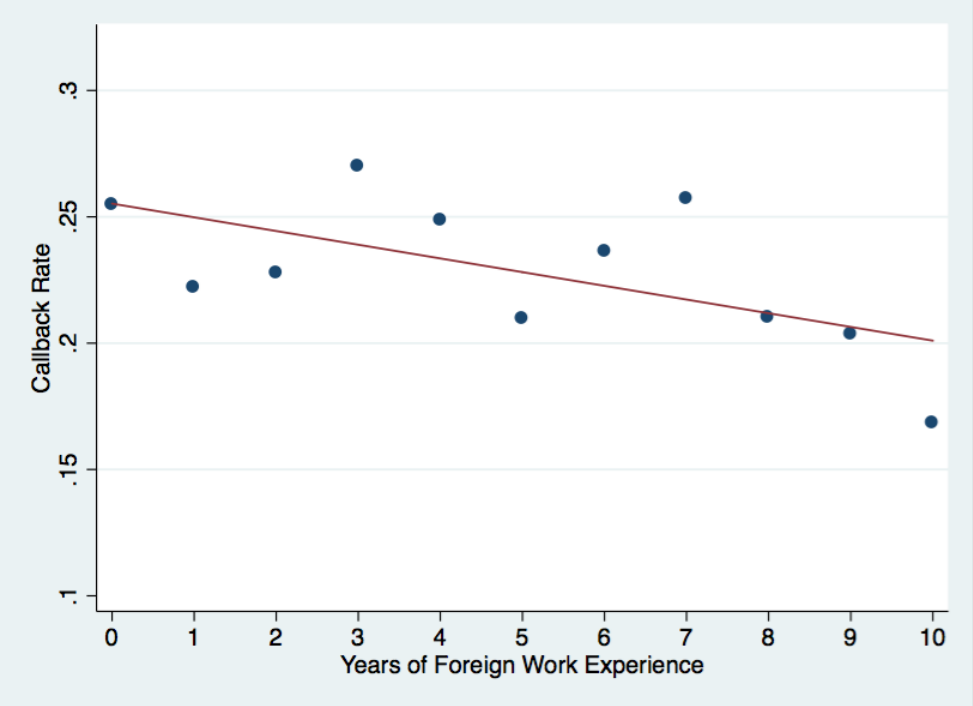
An initial exploration of the data reveals callback rates to be lower for job applicants with foreign work experience, holding other things constant. Figure 2, for example, presents the simple graph of callback rates shown separately for foreign and local resumes, with 95 percent confidence intervals. On average, employers preferred workers who have spent years working domestically to similar workers who have spent the same amount of time abroad. In addition, callback rates declined as foreign work experience increased. Figure 3 presents a plot of callback rates as a function of years spent working abroad. A simple linear regression shows an inverse relationship between both variables; the resulting line is downward sloping. In the following section, I turn to a regression framework to estimate more precise effects.

Figure 2. Callback rate by resume treatment status



Notes: The figure is generated by computing the mean callback rate for resumes without foreign work experience (local, n=3752) and with foreign work experience (foreign, n=3722). Ninety-five percent confidence intervals are indicated

Figure 3. Callback rate vs. length of foreign experience



Notes: The figure is generated by computing the mean callback rate for resumes associated with each year of foreign work experience. The resulting line provides the result of a simple regression of callback rates on years of foreign work experience.

I use the following equation to identify the effect of having foreign work experience on employer callback rates:

$$(1) \quad Callback_{ij} = \alpha + \beta_1 ForeignExp + \beta_2 \boldsymbol{X}'_{ij} + \delta_j + \varepsilon_{ij}$$

Obtaining a callback from the employer of job ad (*j*) is indicated by *Callback=1* for job applicant (*i*). *ForeignExp* signifies the treatment status of the job applicant and is a dummy variable for having foreign experience. β_1 indicates the effect of having foreign work experience on callbacks and is the coefficient of interest. A vector of controls, $\boldsymbol{X}$, includes gender, resume quality, log expected salary, day sent (the resume was sent in either the first or second day), total years of work experience, and total number of jobs held. Because randomization was stratified by job ad, job ad fixed effects are included. Standard errors are clustered by job applicant because each applicant's resume was sent to two job ads.

A similar equation is used to estimate the effect of length of work experience abroad:

$$(2) \quad Callback_{ij} = \alpha + \beta_1 ForeignLength + \beta_2 \boldsymbol{X}'_{ij} + \delta_{j,quality} + \varepsilon_{ij}$$

In equation (2), *ForeignLength* is an integer value with length of foreign work experience specified in years. A difference between this equation and equation (1) lies in the use of fixed effects for job ad and quality of resume—$\delta_{j,quality}$. To understand why this could be necessary, note that length of foreign work experience will be positively correlated with total years of work experience for treatment resumes within each job ad. This is so by construction: When a resume is randomized to have X years of foreign experience, it also obtains X additional years of total work experience (for example, total years of work experience cannot be less than length of foreign work experience). Hence, the variables are not completely independent. From a specification using only job ad fixed effects, some of the effect of *ForeignLength* will be estimated out of comparing resumes randomized with fewer years of foreign experience with those with more. But comparing both might confound the effect of total work experience and length of time worked abroad. By using job ad and quality of resume fixed effects, total years of experience are held constant, because within the same job ad and quality of resume, the comparison is limited only to those control and treatment resume pairs in which total years of experience is constructed to be exactly the same.[15]

Overall, employer callback rates responded negatively to foreign work experience. Table 6 reports regression results for equations (1) and (2) with and without control variables.[16] Controls made little difference to the coefficient of interest (although, as expected, they improved precision). Having foreign work experience was associated with a 2.8 percentage point decline in the employer callback rate—an almost 12 percent decline from the baseline callback rate of 24 percent. Callback rates were lower for workers who have spent a longer time abroad. For every year of foreign work experience, the estimated probability of being called for an interview dropped by around 0.5 percentage points. This result did not differ when an alternate regression was used, in which the effect of length of foreign work experience was estimated using only job ad fixed effects and controlling for total years of work experience as a separate variable (as shown in column 5).

The coefficients from other resume characteristics may also be of interest. Female applicants received more callbacks than males, and not owing to occupational differences, because the regressions control for job ad. Although this may seem surprising, it is perhaps understandable given the context: The Philippines ranks as the ninth best country for gender equality, according to a report by the World Economic Forum (2014).[17] In addition, higher expected wages were associated with fewer callbacks in the experiment. Applications that declared more past jobs received more callbacks. A later section will return to these results when discussing the potential mechanisms behind the effect of foreign work experience.

[15] Using fixed effects for job ad and quality of resume for equation (1) is justified as well but rules out estimating the effects of quality of resume, total years of work experience, and number of jobs held, because these covariates drop out of the equation. For transparency, I show results using fixed effects for job ad and quality of resume for equation (1) in the main table as well. In practice, the use of either fixed effects does not matter for the results.

[16] Reporting regression results from specifications with and without controls is consistent with the recommendation of Lin (2013) for experiments, to ensure against specification searching.

[17] In fact, the Philippines is one of the few countries where the unadjusted wages of women are higher than those of men (International Labour Organization 2014)

Table 6. The effect of foreign experience on callback rates

	(1) Callback	(2) Callback	(3) Callback	(4) Callback	(5) Callback	(6) Callback
Has foreign experience=1	-0.0286***	-0.0280***	-0.0269***			
	(0.0101)	(0.0071)	(0.0067)			
Length of foreign experience				-0.0054***	-0.0049***	-0.0048***
				(0.0014)	(0.0011)	(0.0011)
Quality (high=1, low=0)		0.0378***			0.0332***	
		(0.0081)			(0.0082)	
Gender (female=1, male=0)		0.0395***	0.0389***		0.0397***	0.0391***
		(0.0095)	(0.0111)		(0.0095)	(0.0112)
Ln(expected salary)		-0.0588*	-0.0347		-0.0578*	-0.0331
		(0.0346)	(0.0398)		(0.0345)	(0.0396)
Order sent		-0.0007	0.0081		-0.0004	0.0085
		(0.0071)	(0.0087)		(0.0071)	(0.0087)
Total years of experience		0.0001			0.0025	
		(0.0019)			(0.0020)	
Total # of jobs held		0.0151*			0.0146*	
		(0.0079)			(0.0079)	
Mean callback	0.24	0.24	0.24	0.24	0.24	0.24
Fixed effects for job ad	N	Y	N	N	Y	N
Fixed effect for job ad* quality	N	N	Y	N	N	Y
Observations	7,474	7,474	7,474	7,474	7,474	7,474
R-squared	0.001	0.639	0.787	0.002	0.639	0.787

Notes: The table presents regression results of callbacks on foreign work experience. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

The negative effect of foreign work experience is not driven by any particular industry. Table 7 shows the main regression separately by industry. Not all point estimates turned out statistically significant, but the effect of foreign work experience was estimated to be uniformly negative across industries. A Wald test cannot reject equality between coefficients. Furthermore, when taking into account the different mean callback rates per industry and calculating relative effects, the estimated effects become more similar to each other (except perhaps for IT).

The negative effect of foreign work experience also did not differ appreciably when looking only at pairs of high quality resumes or pairs of low quality resumes. Heterogeneous effects by resume quality are presented in Table 8. The magnitudes of the effect across columns 1 and 2 and across 3 and 4 were the same as confirmed by Wald tests.

Appendix Table A2 shows some checks for robustness on the main finding by presenting results from alternative specifications. Column 1 reproduces the original regression for comparison. In Column 2, the regression uses probit instead of OLS. Column 3 shows the analysis on data with dropped observations from the pilot study. In Column 4, only observations from job applications sent to the first job ad are kept, dropping those associated with the second job ad. The effect of foreign experience was consistently negative across specifications.

Table 7. The effect of having foreign experience on callback rates by firm industry

	(1) Callback (Admin)	(2) Callback (Construction)	(3) Callback (Finance)	(4) Callback (Sales)	(5) Callback (IT)
Has foreign experience=1	-0.0120 (0.0128)	-0.0453*** (0.0164)	-0.0306* (0.0178)	-0.0429*** (0.0158)	-0.0126 (0.0150)
Mean callback rate	0.13	0.30	0.25	0.22	0.30
Controls	Y	Y	Y	Y	Y
Fixed effects for job ad	Y	Y	Y	Y	Y
Observations	1,502	1,465	1,537	1,493	1,477
R-squared	0.610	0.659	0.556	0.625	0.710
Wald statistic			6.15		
p-value			0.1885		

Notes: The table presents regression results of callback on foreign work experience separately for each firm industry. The last row presents results from a test of equality between coefficients of foreign work experience across industries. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

Table 8. The effect of foreign experience on callback rates by quality of resume

	(1) Callback Low quality	(2) Callback High quality	(3) Callback Low quality	(4) Callback High quality
Has foreign experience=1	-0.0228** (0.0093)	-0.0310*** (0.0097)		
Length of foreign experience			-0.0046*** (0.0015)	-0.0049*** (0.0016)
Mean callback rate	0.22	0.26	0.22	0.26
Controls	Y	Y	Y	Y
Fixed effects for job ad	Y	Y	N	N
Fixed effects for job ad* quality	N	N	Y	Y
Observations	3,735	3,739	3,735	3,739
R-squared	0.786	0.787	0.786	0.787
Wald statistic	0.76		0.05	
p-value	0.3846		0.8151	

Notes: The table presents regression results of callback on foreign work experience by subsample of quality of resume. The last row presents results from tests of equality between coefficients of foreign work experience across subsamples. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

One might worry that randomization simply generated strange combinations of country of foreign work experience and job industry in resumes so that these unusual combinations accounted for the lower callback rate of resumes with foreign work experience. For example, employers might ignore resumes of returning migrant workers from Japan whose background is in construction, because such a job is highly uncommon for Filipinos. Hence, it is worth

checking whether the negative effect persists in job applications where country of foreign experience and job industry are typical. It is widely known that for Filipino migrants the Middle East is a popular destination for construction workers. But when confining the analysis to the subgroup of resumes with a background in the Middle East, compared to resumes with only domestic experience, the negative effect of foreign experience in construction job ads remained, as shown in column 5 of Appendix Table A2. The negative effect of foreign work experience did not appear to be generated by unusual combinations of resume characteristics.

The results presented here go against the usual understanding that foreign work experience translates into a "brain gain" for origin countries. It contradicts earlier findings that suggest that substantial employment gains can be had from return migration. But why might employers dislike workers with foreign experience?

The next section presents a discussion of possible mechanisms. First, employers may think that migrants negatively select into migration or are negatively selected from the pool of existing migrants. Second, employers may think return migrants expect high wages and thus be disinclined to interview them. Third, they may value return migrants but believe they are overqualified. Fourth, they may expect low tenure from return migrants who are inclined to take other jobs abroad. Finally, employers may value local knowledge over overseas experience; location-specific human capital is important. This study provides evidence supporting the last mechanism and against the other explanations.

VI. MECHANISMS

Negative signaling

One reason return migrants may obtain a lower callback rate is that employers might perceive negative selection of return migrants. The emphasis on perception is key here because, although fictitious resumes cannot self-select and randomization ensures that foreign experience (and not another factor) produces the lower callback rate, the effect of foreign experience may still arise out of employers' perceptions of return migrants as being negatively selected. This mechanism is referred to as *negative signaling*, to distinguish it from negative selection.

Negative signaling may arise in two ways from the experiment: (1) Employers might perceive that migrant departure in itself conveys a bad signal or (2) employers may interpret migrant return as a negative signal that is due to a failure to stay abroad. The following subsections provide evidence against both of these potential explanations of the main result.

Migrant departure as a negative signal

We sent cover letters with randomly chosen job applications to test whether resumes might transmit a positive or negative signal to employers. Twenty percent of control resumes were sent with a letter indicating that the applicant had recently received a job offer from abroad but had to withdraw owing to some plausible exogenous reason. The letters contained such explanations as a working visa that suddenly failed to process or a family member's illness. The idea was to test whether selection into migration by itself conveyed a negative signal to employers, because applicants with the cover letter selected into migration but had yet to accumulate foreign experience. Correspondingly, another 20 percent of foreign resumes were sent with an attached

letter saying that the applicant had returned home because of a plausible exogenous event—complications with an extension for a work contract abroad suddenly arose or an illness in the family suddenly had to be attended to. Although such reasons still could have been taken by employers to signal applicant quality, the idea was to eliminate, to the extent possible, the negative signal associated with return by providing a reason unrelated to personal failure. No cover letters were sent with the rest of the applications.

Employers appear to perceive migrant departure as a positive signal rather than as a negative signal. Table 9 presents regressions estimating the effect of cover letters on callback rates, holding constant the usual set of control variables. Considering only control resumes (those with purely domestic work experience), if migrant departure by itself conveys a negative signal, then resumes indicating an almost completed attempt to work abroad should have had a lower callback rate. But column 1 shows that such resumes received a 3.9 percentage point higher callback rate than resumes that had not indicated an attempt to move abroad. The positive coefficient is consistent with employers believing in Filipinos' positive selection into migration.

This result is remarkably in accordance with what existing studies have found regarding the nature of selection of Filipinos into migration. When looking at survey data of actual Filipinos, researchers have found that Filipino migrants possess observed traits that indicate higher productivity than their counterparts. They tend to be younger and better educated (Ducanes and Abella 2008). More importantly, they also appear to be positively selected on unobserved traits that indicate higher productivity. For example, Clemens, Montenegro, and Pritchett (2008) estimate where in the distribution of home country wages Filipino migrants' wages (before they move) come from. They compare wage residuals arising from Mincer-type regressions of Filipino migrants versus non-migrants. They estimate that the mean residual of movers lies at the 54th percentile of the distribution of residuals of non-migrants, suggesting (modest) positive selection. The employers' belief in this study squares with the fact that Filipino migrants are positively selected in real world data.

Migrant return as a negative signal

A separate but related issue concerns whether employers believe the act of returning, by itself, conveys a negative signal—that return migrants are negatively selected from the pool of Filipino workers abroad. Borjas and Bratsberg (1996), for example, model how, if migrants base their initial migration decision on overly optimistic expectations about employment abroad, it is the less skilled who return home. The less skilled are most vulnerable to worse-than-expected employment outcomes at the destination, so this will be the group choosing to return. Thus, the lower callback rate for resumes with foreign experience may arise from the negative signal conveyed by this type of return. Employers may value overseas experience but consider those who return to be less desirable workers, along dimensions not completely captured by the objective qualifications stated in the resume. Even given the positive signal associated with migrant departure, this negative signal regarding return may be significant enough to translate into a net negative effect on callback rates.

Employers in this study, however, did not appear to perceive migrant return as a negative signal. Column 2 of Table 9 displays results for the effect of cover letters only for resumes with foreign experience. Again, cover letters were randomly assigned to these foreign resumes, and they described the return home as an event outside the migrant's influence (that is, not due to a

personal failure). In principle, the cover letter should minimize the negative signal. Therefore, if return migration conveyed a negative signal, then those resumes without a cover letter should have had a lower callback rate, because in principle the cover letter should minimize the negative signal. But the cover letters appear to have had a negligible effect; in fact, there appears to be no difference between those who declared they had to return home for an exogenous reason and those who did not.[18]

Table 9. The effect of cover letters

	(1) Callback for control resumes	(2) Callback for foreign resumes
Cover = move abroad cancelled	0.0393**	
	(0.0200)	
Cover = stay abroad finished		-0.0070
		(0.0165)
Mean callback rate	0.25	0.23
Controls	Y	Y
Fixed effects for job ad	Y	Y
Observations	3,752	3,722
R-squared	0.749	0.751

Notes: The table presents regression results of callback on cover letter for the subsamples of control and foreign resumes. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

Perhaps an even more important reason to doubt negative signaling from return has to do with declining rates of callback as resumes' indicated length of foreign experience increases. The underlying economics suggest that negative signaling should be all about the effect at the extensive margin, not intensive margin, of foreign work experience. Furthermore, the Borjas and Bratsburg (1996) model implies that the negative effect of foreign experience must manifest the most in applicants who had spent the least amount of time abroad. Because workers with low ability are more likely to realize failure earlier on in their tenure abroad, there is less reason to suspect failure among workers who have been able to stay long. Hence, the negative signal, if anything, should be most prominent (and callback rates lowest) for workers with the briefest spells abroad.

The data reject this reasoning. Table 10, for example, presents regression results that include both the dummy variable of having foreign work experience and years spent working abroad in the same equation. These results indicate that the decline in callback rates is not explained by a migrant having returned from abroad (the extensive margin) as much as it is by time spent

[18] A caveat to the results regarding the cover letters: They might indicate nothing about the content of cover letters but simply capture the effect of having sent one. Ideally, all resumes should have been sent with a cover letter, with some containing a generic message providing little information. The generic cover letters would have served as the ideal comparison group to the cover letters with an attached explanation. Nevertheless, that the effects are asymmetric between cover letters in the control and foreign resumes is reassuring. Unless there is a compelling reason why cover letters should have had differential effects between the two groups, the contents would be driving the results rather than the cover letters by themselves.

abroad (the intensive margin). Figure 4 shows fully flexible coefficient estimates that detail the effect of each separate year of foreign experience on callback rates, the omitted category being the group of resumes with no foreign experience. A full set of controls was used to generate the figure and indicate estimated confidence intervals at the 95 percent level.[19] The coefficient estimates are all negative, except for an outlier at 7 years. More importantly, the coefficients become more negative as years of foreign work experience increased. It is difficult to attribute this pattern to negative signaling arising from return.

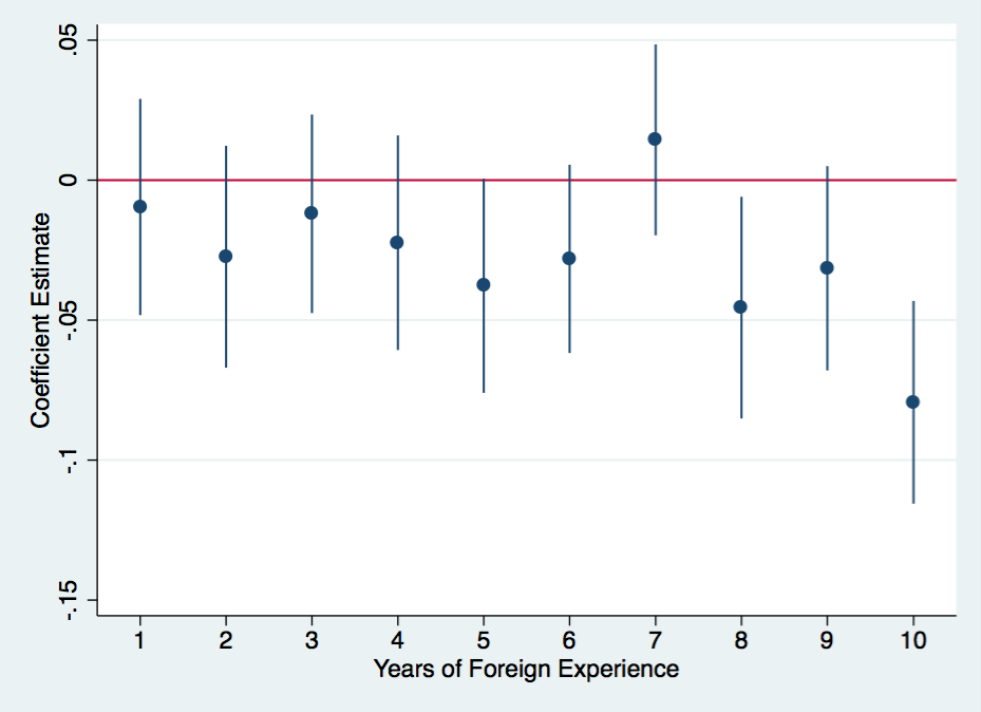
Table 10. The effect of foreign experience at the extensive and intensive margins

	(1) Callback	(2) Callback
Has foreign experience=1	-0.0043	-0.0039
	(0.0153)	(0.0146)
Length of foreign experience	-0.0043*	-0.0042*
	(0.0024)	(0.0023)
Mean callback	0.24	0.24
Controls	Y	Y
Fixed effects for job ad	Y	N
Fixed effect for job ad* quality	N	Y
Observations	7,474	7,474
R-squared	0.639	0.787

Notes: The table presents regression results that include both the dummy variable of having foreign work experience and years of foreign work experience in the same equation. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

[19] Appendix Table A3 provides the corresponding regression table.

Figure 4. Coefficient estimates by years of foreign experience



Notes: The figure plots fully flexible coefficient estimates of a regression of callback on a set of dummies for years of foreign experience. The regression uses a full set of control variables. Ninety-five percent confidence intervals are indicated.

High expected wages

Return migrants might obtain a low callback rate simply because employers believe these workers demand higher wages than other applicants. Hence, though foreign experience may be valuable, an employer might expect to pay a higher price or incur extra bargaining costs. As a result, the additional cost may turn out to be larger than the benefit of hiring someone with experience abroad, which could explain why foreign resumes in this experiment had lower callback rates.

This hypothesized mechanism relies on expected wages being unobserved, but in this experiment, wages are made explicit. As previously discussed, the two job websites we used allow applicants to indicate expected salary. Most companies declared a range of reasonable monthly salaries to expect in offered positions. For each job ad, we randomly assigned an expected salary to be added to each resume and application. Expected salary was constrained to be in the company's declared range and divisible by a thousand pesos. If a company did not state a salary range, research assistants provided an estimate of the appropriate range. As a result, provided that employers believed in declared expected salaries, their perceptions about the cost of hiring applicants with foreign experience should have been the same for applicants without foreign experience. Foreign experience continued to exhibit a negative effect on callback rates, as shown in Table 6, even when salary was declared; this finding provides evidence against high

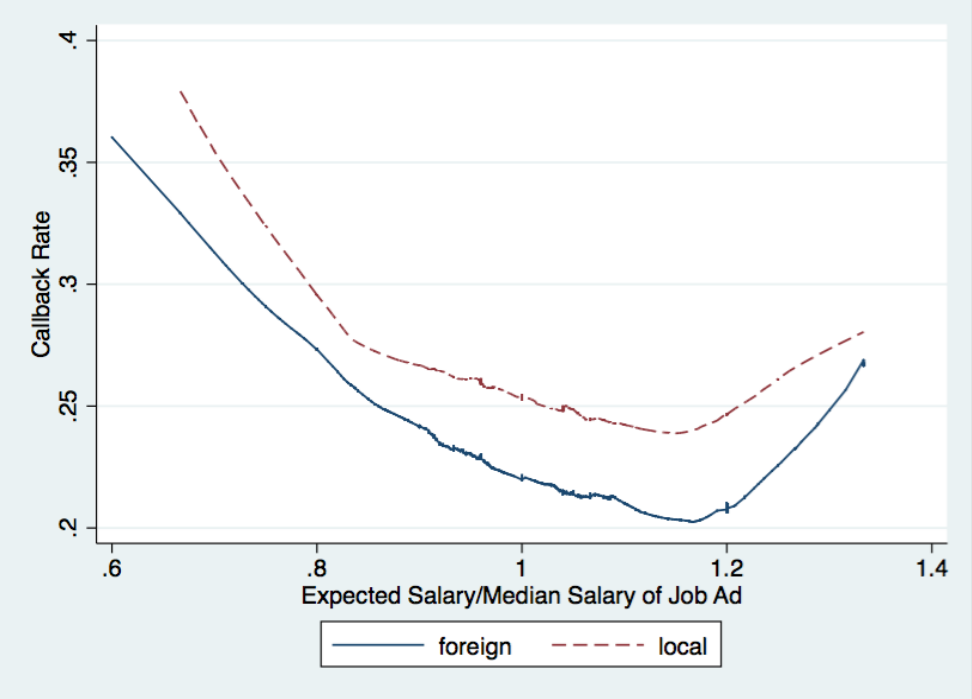
expected wages as an explanation. Higher expected wages led to fewer callbacks, which suggests that employers interpret expected wage as some signal of a worker's reservation wage.

This is not to suggest though that employers do not interpret declared expected wage as some signal of a worker's marginal product. One concern in fact is that this interpretation might artificially create the negative effect of foreign work experience found in this experiment. My interviews with employers, discussed in a later section, indicate that employers normally anticipate return migrants' expected wages to be excessively high compared to those of non-migrants. Then, return migrants might be giving off a negative signal about their productivity by simply having their expected wages equal non-migrants' in this study. This factor may have translated into the lower callback rates that return migrants receive in the experiment.

Fortunately, this alternative story can be tested in the data. Declaring lower-than-average expected wage in a resume might give employers a negative signal, and that would imply that the negative effect of foreign work experience for return migrants should be less at the higher end of the distribution of declared expected wages in resumes. But this does not seem to be the case. Figure 5 shows the relationship between expected wages and callback rates for the group of resumes with foreign experience and the group without. The horizontal axis denotes the ratio of resumes' expected salary to the median of the salary range indicated by respective job ads. In general, higher expected salary ratios lead to lower callback rates. But the smoothed graph for resumes with foreign experience appears to show a simple downward shift compared to the graph of resumes with no foreign experience. Indeed, a formal test cannot reject the null hypothesis that the effect of foreign work experience is invariant at different levels of declared expected wage (results not shown, but available upon request). Higher expected wages did not appear to reduce the negative effect of foreign work experience.

None of this is to suggest that employers do not think migrants in general have high expectations for things other than wages, such as job benefits (e.g., vacation time, work schedule), perks, or being treated in a "Western way." This possibility is harder to rule out. In fact, interviews with employers discussed in a later section, hinted that this may be the case. Assuming however that expected salary is a good proxy for expectations about other job amenities, this hypothesis suggests that the interaction between higher expected wages and foreign experience should increase the penalty from having foreign experience. As already shown, however, this was also not the case. Higher expected wages did not appear to magnify the negative effect of foreign work experience.

Figure 5. Fewer callbacks for resumes with foreign experience at all expected wage levels



Notes: The figure is estimated using locally weighted regressions of callback on expected wage ratio (the declared expected wage in a resume divided by the median salary declared by resumes submitted to the same job ad). The regressions use a running line least squares smoother with bandwidth of 0.8. The regressions are shown for the samples of both foreign and local resumes.

Overqualification

A job applicant is overqualified if he has educational attainment or skills that surpass what is required to achieve sufficient job performance. Employers may prefer applicants who fulfill only the minimum job qualifications. Bewley (1998), for example, notes that firms might avoid hiring overqualified applicants for fear that they might become a threat to their managers or quit as soon as they find a more suitable job. If experience working abroad is viewed as surplus human capital, then that could account for the lower callback rates in this study.

Overqualification does not appear to be a compelling explanation for the negative effect of foreign work experience. If it were, then applicants with resumes constructed to have high quality should have had less appeal to employers than those who barely fulfilled minimum required skills and background for the job, namely, low quality applicants. High quality resumes described applicants from elite educational backgrounds with additional skills and two more years of work experience than the low quality resumes. However, these resumes had higher callback rates than low quality resumes, as shown in Table 6.

Low expected tenure

Perhaps employers consider return migrants to be flight risks, likely to have low tenure on the job; they may suppose such migrants prefer working abroad and thus be likely to depart again

as soon as a better opportunity abroad opens up. Frequent turnover hurts employers because they incur high recruitment and training costs for replacements. Various surveys have found high turnover as a main concern of employers. A recent survey of some 300 executives in the Philippines, conducted by researchers at a large job website, found that 58 percent of respondents agreed that "job-hopping makes resumes look bad."[20]

Holding total years of experience constant, total number of jobs held, in a resume, provides an indication of an applicant's flight risk. If employers disfavor migrants primarily because they expect them to have low tenures, then a migrant's having worked many jobs in a short time must also provide a bad signal to employers.

Revisiting Table 6, no negative effect was found on callback rates for having worked in many jobs, holding total years of experience constant. In fact, the point estimate for total jobs held is positive.

Location-specific human capital

Finally, location-specific human capital can be a potential mechanism for the negative effect of foreign work experience. Becker (1962) initially proposed the idea that investments in human capital might be country specific and skills might not easily transfer across geographic locations. The causal evidence for the theory is limited, but Bazzi et al. (2016) found that the theory could be true. Using a large-scale relocation program in Indonesia as a natural experiment, Bazzi et al. showed that migrant farmers became less productive when they moved to locations with dissimilar agroclimatic environments as their place of origin. Similarly, the reluctance of employers to hire return migrants in this study might have occurred because foreign work experience does not easily transfer to the domestic setting.

Employers may value domestic over foreign experience because the local context requires knowledge of location-specific production methods. By spending time away from home, migrants lose this knowledge of the local economy and their human capital depreciates. As a result, one prediction is that callback rates may fall as years of foreign experience increase. This is consistent with the finding in this experiment.

To further test the theory of location-specific human capital, we conducted a sub-experiment. Keeping all procedures the same, we sent 2,000 additional resumes to job ads, altering the timing of foreign experience for treatment resumes. Instead of indicating foreign work experience in the last job held, we showed work histories as having foreign experience in the first job held, thus declaring recent local job experience after the return from abroad. Because everything else was kept the same from the original protocol, the alteration should result in a reduction of the negative effect of foreign experience if location-specific human capital is a prevailing explanation. Return migrants with foreign experience would also have had time to recover their domestic human capital.

Table 11 shows the results of running all the same regressions using data from the sub-experiment and comparing the outcome to the original results. The focus is on the coefficients

[20] From JobStreet (2011). See http://www.jobstreet.com.ph/aboutus/preleases119.htm

for foreign experience. Panel A presents results for the full samples and Panel B focuses on specific industries.

Table 11. Comparing treatment effects of the main and sub experiment

	Main experiment (n = 7474)	Sub-experiment (n = 1980)	Difference
Panel A: All industries			
With controls			
Has foreign experience=1	-0.0280***	-0.0169	-0.0111
	(0.0071)	(0.0146)	(0.0140)
Length of foreign experience	-0.0048***	-0.0038*	-0.0010
	(0.0011)	(0.0021)	(0.0016)
Panel B: By industry			
Has foreign experience=1			
With controls			
Admin	-0.0120	0.0119	-0.0239
	(0.0128)	(0.0260)	(0.0248)
Construction	-0.0453***	0.0012	-0.0465
	(0.0164)	(0.0355)	(0.0334)
Finance	-0.0306*	-0.0263	-0.0043
	(0.0178)	(0.0338)	(0.0327)
Sales	-0.0429***	-0.0668*	0.0240
	(0.0158)	(0.0367)	(0.0342)
IT	-0.0126	-0.0146	0.0020
	(0.0150)	(0.0305)	(0.0291)
Length of foreign experience			
With controls			
Admin	-0.0025	0.0026	-0.0051*
	(0.0019)	(0.0036)	(0.0029)
Construction	-0.0081***	0.0029	-0.0110***
	(0.0026)	(0.0044)	(0.0036)
Finance	-0.0051*	-0.0071	0.0020
	(0.0026)	(0.0047)	(0.0038)
Sales	-0.0071***	-0.0128**	0.0058
	(0.0024)	(0.0059)	(0.0045)
IT	-0.0018	-0.0044	0.0025
	(0.0023)	(0.0047)	(0.0036)

Notes: The table reports coefficient estimates of the effect of foreign work experience on callback for the main and sub experiments. The last column presents results from testing the difference between coefficients found in the main and sub experiments. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

In contrast with the main experiment, I mostly do not reject the null hypothesis that the effect of foreign work experience is zero in the sub-experiment. Some point estimates turned out to be negative, but as suggested by the hypothesis, most appear smaller in magnitude relative to those in the main experiment. Indeed, the timing of foreign work experience, whether past or recent, appears to matter. In terms of the preferred specification, the effect of having foreign experience in the side experiment was around two-thirds as large as the effect in the main experiment. In general, however, I cannot conclude that the differential effect between the main and sub-experiments is statistically significant from zero, although the difference was significant for results in construction and administrative jobs for length of foreign experience.

In sum, the results suggest that the preference for location-specific human capital might explain the negative effect found for foreign experience and that the negative effect may in fact be short-lived. This section presented evidence against other mechanisms, yet this particular channel cannot be ruled out. Moreover, the fall in callback rates as years of foreign work experience increase corroborates the theory that human capital gained in the home country depreciates abroad, at least from the perspective of employers.

VII. DISCUSSIONS WITH EMPLOYERS

As a supplement to the study, a year after the experiment I conducted interviews with employers. The objective was to let employers offer their own explanations for my findings and to see whether they were consistent with theories presented here. Respondents were recruiters from the HR departments of companies in the same industries as the original study (though not necessarily part of it) who had online job ads currently posted. Those contacted were HR personnel whose email addresses were publicly available through company websites or LinkedIn. Out of the 283 contacted, 34 responded. Conversations took place mostly through email exchange, although some transpired by phone call or web chat.

The interviews were carefully structured to avoid influencing recruiters' responses with prior information. First, recruiters were simply asked,

> Do you believe employers in your industry are more willing to hire returning overseas Filipino workers over workers whose experience is in working with domestic employers? Why or why not?

After they responded, I revealed the basics of the experiment: the design of sending fictitious resumes; the result that resumes with foreign work experience got 12 percent fewer callbacks compared to other resumes; and the finding that the callback rate declined the longer the period an applicant spent abroad. No other information was offered. I asked whether they could make sense of this finding but refrained from offering any explanations and prodded only to ask for clarification on their responses or to ask for more specific examples.

Two types of responses stood out. The initial response from a substantial majority was to mention pay scale as a concern. Most respondents indicated that relevance of work experience to a position is the most important factor in hiring decisions, not where experience is attained. But they feared that returning workers expect higher salary offers than the company's budget could accommodate. From experience, they said returning workers do not normally agree on the hiring salary rate, because it is often lower than what they received abroad. Some respondents even mentioned that an applicant with foreign exposure may be desired because of the unique skills they bring, especially when the job entailed interacting closely with partners from a foreign country. But the conversation usually went back to such workers' demand for higher salary being a deal breaker. In that case, employers said, they would hire the applicant with a domestic background.

This response regarding high expected wages is interesting because it might suggest that callback rates to returning migrants would have been even lower in the experiment had expected salary not been declared; employers would have had even more reason to suspect high

expectations from those with foreign work experience. However, this concern about high expected wages persisted even after I described the experiment to respondents and pointed out that declared expected salaries were held constant between job applications. On one hand, this concern reflects how respondents may simply have misunderstood the explanation of the experiment. On the other hand, they could be implying that declaring expected salaries does not completely shut off this mechanism; they could be anticipating returning migrants to have high expectations in other dimensions not captured by declared expected wage, such as vacation days or wage growth. Although, again, this cannot be confirmed by the preceding analysis, it remains a possible mechanism.

It is when the details of the experiment were revealed that a second type of response emerged, hinting at the depreciation of local human capital as a plausible explanation. A recruiter described the simplest example of how this can occur: The recruiter was trying to hire a project manager to oversee several projects around Metro Manila. The following is a translation from the local dialect:

> Because sometimes, especially if they are assigned to a particular place, what OFWs [Overseas Filipino Workers] tell us is that they've been away from the country for a long time and so they are no longer familiar with how to go, how to arrive at a place, that destination. They no longer know how to go around places.

Another typical response referred to "culture mismatch"—the difficulty returning migrants have in embracing local company culture after they become used to work norms abroad. One can view this mismatch as having poor country-specific human capital. Here was one reply, for example:

> OFW adapts to their superior's working style and copes up in working with diverse national and culture. When time comes they apply here in PH- they now carry the culture of his previous employer- HR and Hiring Manager may see it during the screening and interviews. [sic]…

One example for this one is our applicant for the Finance Manager Position—she works in hospitality industries in Micro-Polynesia region, has almost 10 years experience in the said field, locally and overseas. We didn't pass her during our screening because 1. Her compensation and benefits expectation is too high (she is used to receive net of tax rate and having worked in hospitality, has a monthly service charge) 2. Her average tenure in local companies are not longer than one year—there is that culture mismatch. [sic]

Some also cited an aversion to returning migrants' conducting themselves in different ways that could strain company culture:

> There's a certain stigma with staff positions. Filipino culture, especially prevalent in local companies, could have this. [We do not like someone with] "outsider" experience already. [sic] …

> Culture in a sense that we tend to stick to "our" ways of doing things. For example, as simple as lunch. If you look at Filipino Local companies, they would take lunch at 11am sleep at 12-1, even the government does this. I'm not

> generalizing, but I've interviewed people also who had experience in Singapore to be part of my team in HR. But at the back of my mind, hiring him would dilute my team environment. Too much of a threat for the rest. [sic]

Although these quotes cannot be taken as definitive (i.e., the response rate for the survey was low, and these are the opinions of a select group, etc.), they are indicative of the value placed on local knowledge and culture and the view that some sort of human capital is lost as a person is away abroad. Other explanations that came out of the interviews, but did not find support in the empirical analysis, included the tendency of returning migrants to have short tenures and to work abroad again, as well as overqualification. But these factors were less commonly mentioned.[21]

VIII. CONCLUSION

The governments of migrant-sending countries, together with international organizations, typically implement programs that actively recruit migrants to return home with the belief that these migrants increase productivity and eventually generate spillovers in domestic economies. Programs usually target the highly skilled and include generous financial incentives. For example, from 1974 to 1990, the Return of Qualified African Nationals program, run by the International Organization for Migration, helped place 2,000 return migrants from 41 African countries into positions back in their home countries (Lowell 2001). The program offered free return tickets for the migrants' families, helped ship personal effects, and covered settling expenses and professional equipment. In India, the Ministry of Science and Technology sets up fellowships that cover up to 500,000 rupees yearly for returning scientists, shouldering salary, travel expenditures, conference visits, and more (Jonkers 2008). In Malaysia, the Returning Expert Program offers a low flat-tax rate of 15 percent on employment income for 5 years and the ability to import two cars tax-free. Similar programs are found in the Philippines, Thailand, China, Argentina, Mexico, and other countries.

To date, however, doubts remain as to the efficacy of such programs. Return migration programs are seldom evaluated for their impact,[22] and take-up rates remain small. McKenzie and Yang (2015) worry that in many cases generous incentives might be subsidizing the return of individuals who are likely to return anyway. Financial incentives might feed resentment or even encourage individuals to move abroad to take advantage of benefits when they return. Then there is the question of who exactly benefits from return to the origin country, even when programs are successful in luring back migrants.

This paper demonstrates that employers may not favor return migrants when similar workers with the same set of skills and educational background are available. The research team sent fictitious resumes and observed the behavior of employers, as measured in callback rates. By

[21] Appendix Table A4 presents a tabulation of recruiter responses.

[22] One exception is a recent study by Del Carpio et al. (2016) evaluating the efficacy of Malaysia's Returning Expert Program; they estimate a positive effect of the program on the probability that applicants will return to Malaysia, but they find this effect to be statistically significant for only a select group of applicants—those who already have an employment offer in the source country and women without a Malaysian spouse.

sending otherwise identical resumes and experimentally varying lengths that applicants worked abroad, the study estimated the effect of foreign work experience on a sample of fictitious job applicants. Findings showed that return migrants obtain lower callback rates than other job applicants, other things being equal. The results hold for both high- and low-skilled migrants and for jobs in the different industries. At least in countries without severe skill shortages, this finding makes it harder for programs subsidizing return to justify their agenda from a cost-benefit standpoint.

Pinpointing exactly why employers behave this way requires further research, despite the potential explanations examined. This study provided evidence against negative signaling, high expectations for wages, overqualification, and high job turnover rates as primary channels. There is some evidence suggesting that the deterioration of location-specific human capital is responsible for the declining callback rates as migrants spend longer times abroad.

Caution, however, must be exercised in interpreting the findings to mean ultimately that return migration has little value. This study looked at select jobs from the two largest job websites in the Philippines. Employers have alternative means with which to recruit workers, and employers may behave differently in alternate settings. In addition, this paper explicates only the foreign work experience of returning migrants. There are other channels through which return migrants could bring value to their home countries. This research does not touch upon human capital externalities in education, of the kind studied by Moretti (2004). Returnees gaining education from elite institutions abroad, for example, may generate positive spillovers when they return, beyond their participation in the labor force. Returnees could bring home monetary savings, an experience of well-functioning political institutions abroad, and raised expectations for their home country (Clemens 2009). In fact, recent estimates from the World Bank hint at the presence of vast amounts of diaspora savings,[23] which suggests that migrants might catalyze entrepreneurial activity when they return.[24] Yang (2006) shows that investment increases upon return, at least for some migrant households. Moreover, research reveals that migrants could spur the improvement of political institutions at home (see, for example, Spilimbergo 2009, Saxenian 2006, and Iskander 2009). These topics are outside the scope of this work.

Nevertheless, this paper brings to light a much less recognized aspect of return: that return migrants may not fare as well in the domestic labor market as commonly assumed. This finding suggests reorienting return migration programs to include provisions for the reintegration of returning workers into the local economy. Even without active encouragement, many international migrants have no choice but to return to their origin country, because most working contracts stipulate that they do. This form of temporary labor migration is prevalent in OECD countries (OECD 2014). For countries in the Gulf Cooperation Council, another major migration corridor for low-skill workers, there is virtually no path to permanent residence even after years

[23] From Ratha (2014). See http://blogs.worldbank.org/peoplemove/files/Note on Diaspora Savings Sep 23 2014 Final.pdf [accessed Jan. 5, 2015]

[24] Note, however, that this estimate appears to contradict a government report, at least in the Philippines, that shows that 70 to 80 percent of overseas Filipino workers do not have significant savings upon return (Newland et al. 2008).

of stay. It is important for leaders to understand the implications of return for these migrants, if home country governments are to assist them.

REFERENCES

Aigner, Dennis, and Glen Cain. "Statistical Theories of Discrimination in Labor Markets." *Industrial and Labor Relations Review,* vol. 30, no. 2, 1977, pp. 175–187.

Barrett, Alan, and Jean Goggin. "Returning to the Question of a Wage Premium for Returning Migrants." *National Institute Economic Review,* vol. 213, no. 1, 2010, pp. R43–R51.

Bazzi, Samuel, Arya Gaduh, Alexander Rothenberg, and Maisy Wong. "Skill Transferability, Migration, and Development: Evidence from Population Resettlement in Indonesia." *American Economic Review,* vol. 106, no. 9, 2016, pp. 2658–98.

Becker, Gary S. "Investment in Human Capital: A Theoretical Analysis." *Journal of Political Economy,* vol. 70, no. 5, 1962, pp. 9–49.

Bertrand, Marianne, and Sendhil Mullainathan. "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review,* vol. 94, no. 4, 2004, pp. 991–1013.

Bewley, Truman. "Why Not Cut Pay?" *European Economic Review,* vol. 42, nos. 3–5, 1998, pp. 459–490.

Booth, Alison L., Andrew Leigh, and Elena Varganova. "Does Ethnic Discrimination Vary Across Minority Groups? Evidence from a Field Experiment." *Oxford Bulletin of Economics and Statistics,* vol. 74, no. 4, 2012, pp. 547–573.

Borjas, George, and Bernt Bratsberg. "Who Leaves? The Outmigration of the Foreign-Born." *The Review of Economics and Statistics, v*ol. 78, no. 1, 1996, pp. 165–76.

Clemens, Michael A. "Skill Flow: A Fundamental Reconsideration of Skilled-Worker Mobility and Development" (working paper, 2009).

Clemens, Michael, Claudio E. Montenegro, and Lant Pritchett. "The Place Premium: Wage Differences for Identical Workers Across the US Border." World Bank Policy Research Working Paper No. 4671, 2008.

Co, Catherine Y., Ira N. Gang, and Myeong-Su Yun. "Returns to Returning." *Journal of Population Economics,* vol. 13, no. 1, 2000, pp. 57–79.

Commission on Filipinos Overseas. "Migrant Stock Estimates, 2012." 2012. Available at http://www.cfo.gov.ph/index.php?option=com_content&view=category&id=134&Itemid=814. Accessed Nov. 18, 2014.

Dayton-Johnson, Jeff, Antje Pfeiffer, Kirsten Schuettler, and Johanna Schwinn. "Migration and Employment." In *Promoting Pro-Poor Growth: Employment,* OECD report, 2009, pp. 144–177.

Del Carpio, Ximena V., Caglar Ozden, Mauro Testaverde, and Mathis Wagner. "The Global Migration of Talent and Tax Incentives: Evidence from Malaysia's Returning Expert Program" (working paper, 2016).

Deming, David J., Noam Yuchtman, Amira Abulafi, Claudia Goldin, and Lawrence F. Katz. "The Value of Postsecondary Credentials in the Labor Market: An Experimental Study." *American Economic Review,* vol. 106, no. 3, 2016, pp. 778–806.

Ducanes, Geoffrey, and Manolo Abella. "Overseas Filipino Workers and their Impact on Household Employment Decisions," ILO Working Paper 411226, International Labour Organization, 2008.

Dustmann, Christian, Itzhak Fadlon, and Yoram Weiss. "Return Migration, Human Capital Accumulation and the Brain Drain." *Journal of Development Economics,* vol. 95, no. 1, 2011, pp. 58–67.

Eriksson, Stefan, and Dan-Olof Rooth. "Do Employers Use Unemployment as a Sorting Criterion When Hiring? Evidence from a Field Experiment." *American Economic Review,* vol. 104, no. 3, 2014, pp. 1014–39.

Gibson, John, David McKenzie, and Steven Stillman. "Accounting for Selectivity and Duration-Dependent Heterogeneity When Estimating the Impact of Emigration on Incomes and Poverty in Sending Areas." *Economic Development and Cultural Change,* vol. 61, no. 2, 2013, pp. 247–280.

Heckman, James J. "Sample Selection Bias as a Specification Error." *Econometrica,* vol. 47, no. 1, 1979, pp. 153–161.

Heckman, James J. "Detecting Discrimination." *Journal of Economic Perspectives,* vol. 12, no. 2, 1998, pp. 101–16.

Heckman, James J., and Peter Siegelman. "The Urban Institute Audit Studies: Their Methods and Findings." In *Clear and Convincing Evidence: Measurement of Discrimination in America,* edited by M. Fix and R. Struyk, pp. 187–258. Washington, DC: The Urban Institute Press, 1993.

International Labour Organization. "Global Wage Report 2014/15: Asia and Pacific Supplement." 2014.

International Organization for Migration. "Enhancing the Role of Return Migration in Fostering Development" (background paper, 2008).

Iskander, Natasha. The Creative State: Migration, Development, and the State in Morocco and Mexico, 1963–2005. 2009.

JobStreet. "Mobile Trend Seen Amongst Filipino Jobseekers." Press Release. 2011. Available at http://www.jobstreet.com.ph/aboutus/preleases119.htm. Accessed Nov. 18, 2014.

Jonkers, Koen. "A Comparative Study of Return Migration Policies Targeting the Highly Skilled in Four Major Sending Countries." MIREM Project. Analytical Report MIREM-AR 2008/05. 2008. Available at http://cadmus.eui.eu/bitstream/handle/1814/9454/MIREM%20AR2008_05.pdf?sequence=1.

Kroft, Kory, Fabian Lange, and Matthew Notowidigdo. "Duration Dependence and Labor Market Conditions: Evidence from a Field Experiment." *Quarterly Journal of Economics,* vol. 128, no. 3, 2013, pp. 1123–1167.

Lanning, Jonathan A. "Opportunities Denied, Wages Diminished: Using Search Theory to Translate Audit Pair Study Findings into Wage Differentials." *B.E. Journal of Economic Analysis and Policy,* vol. 13, no. 2, 2013, pp. 921–58.

Lin, Winston. "Agnostic Notes on Regression Adjustments to Experimental Data: Reexamining Freedman's Critique." *Annals of Applied Statistics,* vol. 7, no. 1, 2013, pp. 295–318.

Lowell, Lindsay B. "Policy Responses to the International Mobility of Skilled Labour." International Migration Papers 45. 2001. Available at www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---migrant/documents/publication/wcms_201774.pdf.

McKenzie, David, and Dean Yang. "Evidence on Policies to Increase the Development Impacts of International Migration." *World Bank Research Observer,* vol. 30, no. 2, 2015, pp. 155–192.

Mincy, Ronald B. "The Urban Institute Audit Studies: Their Research and Policy Context." In *Clear and Convincing Evidence: Measurement of Discrimination in America,* edited by M. Fix and R. Struyk. Washington, DC: The Urban Institute Press, 1993, pp. 165–86.

Moretti, Enrico. "Workers' Education, Spillovers, and Productivity: Evidence from Plant-level Production Functions," *American Economic Review,* vol. 94, no. 3, 2004, pp. 656–690.

Newland, Kathleen, Dovelyn R. Agunias, and Aaron Terrazas. "Learning by Doing: Experiences of Circular Migration." Washington, DC: Migration Policy Institute: Insight, 2008.

Organization for Co-operation and Development (OECD). International Migration Outlook 2014. OECD Publishing. 2014. doi:10.1787/migr_outlook-2014-en.

Oreopoulos, Philip. "Why Do Skilled Immigrants Struggle in the Labor Market? A Field Experiment with Thirteen Thousand Resumes." *American Economic Journal: Economic Policy,* vol. 3, no. 4, 2011, pp. 148–71.

Ratha, Dilip. "International migrants' savings and incomes." World Bank Blog, 2014.

Reinhold, Steffen, and Kevin Thom. "Migration Experience and Earnings in the Mexican Labor Market." *Journal of Human Resources,* vol. 48, no. 3, 2013, pp. 768–829.

Saxenian, AnnaLee. *The New Argonauts: Regional Advantage in a Global Economy.* Cambridge, MA: Harvard University Press, 2006.

Spilimbergo, Antonio. "Democracy and Foreign Education." *The American Economic Review*, vol. 99, no. 1, 2009, pp. 528–543.

Theoharides, Caroline. "Manila to Malaysia, Quezon to Qatar: International Migration and the Effects on Origin-Country Human Capital" (working paper, 2016).

UN General Assembly, International Migration and Development. Report of the Secretary-General, May 18, 2006, A/60/871.

Wah, Saw Htay. "Do Employers in Myanmar Prefer Workers Who Accumulated Skills in More Advanced Countries? Evidence from a Field Experiment." CESR-Schaeffer Working Paper No: 2015-029, 2015.

Wahba, Jackline. "Who Benefits from Return Migration to Developing Countries?" IZA World of Labor. 2015.

World Economic Forum. "The Global Gender Gap Report 2014." 2014. Available at http://www3.weforum.org/docs/GGGR14/GGGR_CompleteReport_2014.pdf.

Yang, Dean. "Why Do Migrants Return to Poor Countries? Evidence from Philippine Migrants' Responses to Exchange Rate Shocks." *Review of Economics and Statistics*, vol. 88, no. 4, 2006, pp. 715–735.

Yang, Dean. "Migrant Remittances." *Journal of Economic Perspectives*, vol. 25, no. 3, 2011, pp. 129–152.

APPENDIX

SUPPLEMENTAL TABLES

Table A1. List of colleges and universities

Top 4 schools (for high quality resumes)	
Ateneo de Manila University	University of Santo Tomas
University of the Philippines	De La Salle University
Other colleges and universities	
Abe International Business College	Pamantasan ng Lungsod ng Pasay
Adamson University	Pamantasan ng Lungsod ng Pasig
Ama Computer College	Pamantasan ng Lungsod ng Maynila
Ama Computer University	Perpetual Help College of Manila
Arellano University	Philippine Christian University
Asia Pacific College	Philippine Normal University
Asian College of Science and Technology	Philippine School of Business Administration
Central Colleges of The Philippines	Polytechnic University of the Philippines
Centro Escolar University	Rizal Technological University
Colegio de San Juan de Letran	Saint Joseph's College of Quezon City
College of Saint Benilde	San Beda College
College of The Holy Spirit	San Pablo Colleges
Concordia College	San Sebastian College
Dr. Filemon C. Aguilar Memorial College	St. Joseph's College of Quezon City
Emilio Aguinaldo College	St. James College Of Quezon City
Eulogio Amang Rodriguez Institute Of Science and Technology	St. Paul College
FEATI University	Systems Plus College Foundation
Far Eastern University	Systems Technology Institute
Holy Angel University	Taguig City University
Informatics Computer Institute	Technological Institute Of The Philippines
Informatics International College	Technological University of the Philippines
International Electronics and Technical Institute	Trinity University Of Asia
Jose Rizal University	Universidad De Manila
La Consolacion University	University of Caloocan City
Letran College	University of Makati
Lyceum Of The Philippines University	University of Perpetual Help
Manila Central University	University of San Carlos
Manuel L. Quezon University	University of The East
Mapua Institute of Technology	University of Manila
National College of Business and Arts	University of Perpetual Help
National University	University of the East
New Era University	
Our Lady Of Fatima University	

Notes: The top 4 universities in the Philippines (Ateneo, La Salle, UP, and UST) are considered as elite schools in the country. They are more commonly known as “The Big Four.” The four are the only schools to rank consistently among the top 800 in the Quacquarelli SymondsWorld University Rankings.

Table A2. Robustness check of the effect of foreign experience on callback rates

	(1)	(2)	(3)	(4)	(5)
	Callback OLS w/ FE	Callback Probit	Callback Main only	Callback Only 1st job ad	Callback Middle East & construction
Has foreign experience=1	-0.0280***	-0.0280***	-0.0278***	-0.0335***	-0.0621**
	(0.0071)	(0.0101)	(0.0074)	(0.0099)	(0.0265)
Controls	Y	Y	Y	Y	Y
Fixed effects for job ad	Y	N	Y	Y	Y
Observations	7,474	7,474	6,866	3,746	916
R-squared	0.639	0.006	0.639	0.641	0.745

Notes: The table presents robustness checks for regressions of callback on foreign work experience. Robust standard errors, clustered at the resume level, are in parentheses. The probit coefficient reports an average derivative. The probit specification does not include fixed effects for job ad because of the incidental parameters problem, and many observations are dropped otherwise. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

Table A3. The effects of foreign experience on callback rates, by each year spent abroad

	(1) Callback
1 year abroad	-0.0098 (0.0197)
2 years abroad	-0.0272 (0.0202)
3 years abroad	-0.0122 (0.0181)
4 years abroad	-0.0227 (0.0196)
5 years abroad	-0.0381* (0.0195)
6 years abroad	-0.0284* (0.0172)
7 years abroad	0.0146 (0.0174)
8 years abroad	-0.0454** (0.0202)
9 years abroad	-0.0310* (0.0186)
10 years abroad	-0.0790*** (0.0185)
Mean callback	0.24
Controls	Y
Fixed effects for job ad	Y
Observations	7,474
R-squared	0.640

Notes: The table presents estimates of the effect of each separate year of foreign experience on callback rates, with the omitted category being the group of resumes with no foreign experience. Robust standard errors, clustered at the resume level, are in parentheses. Regressions include a constant term. *** p<0.01, ** p<0.05, * p<0.1

Table A4. A tabulation of recruiter responses to the interview

Recruiter responses before the experiment was revealed	
We prefer returning migrant workers because…	
They are familiar with unique procedures, techniques; foreign exposure is good	4
They have better communication skills (e.g., can interact with foreign clients well)	2
No particular reason	1
We do not prefer returning migrant workers because…	
They usually have high expected salaries/demands	15
The local candidate has better knowledge of business, law, culture in the Philippines	3
The local talent pool is already abundant	2
They are usually overqualified	1
They will most likely go abroad again soon	0
It depends on various factors: Skills, position, etc.	11
Recruiter responses after the experiment was revealed	
The lower callback rate for workers with foreign work experience is probably because…	
They usually have high expected salaries/demands	9
The local candidate has better knowledge of business, law, culture in the Philippines	8
The local talent pool is already abundant	0
They are usually overqualified	0
They will most likely go abroad again soon	6
I have no idea why the results are that way; in my experience we prefer foreign experience	1
No reply/nothing to add	10

Notes: The tabulation adds 1 for each mention of a particular answer. As such, a limitation of this tabulation is that it counts each answer with equal weight; it doesn't capture which explanations recruiters emphasized or highlighted. Because some respondents had multiple answers, the tabulation does not add up to the total number of respondents. Whenever respondents said, "It depends on various factors…" they usually explained that foreign work experience is more valuable for higher management positions or for those positions that interact frequently with foreign clients. Otherwise, they said that they do not give any preference to where work experience was obtained. As shown, some respondents had nothing else to add, or did not reply, after the first set of questions.

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