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Wage Returns to English Skills: A Comparison of Local and Multinational Banks in Thailand

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Abstract

While many studies have examined the wage returns to English language skill for immigrants in English-speaking countries, far fewer have examined the wage returns to English-language skill in countries where it is used primarily as a second language. This study examines the wage returns to English-language skill for workers in banks in Bangkok, Thailand. It is the first attempt to estimate the wage returns to English skill in Thailand, or in the Southeast Asia region in general. The study uses an original and detailed rubric to let respondents self-assess their English skill. There are positive wage returns to English skill of around 16-23%, but only for workers with 10 years of work experience or fewer. The study also examines the differential returns to English skills in local and multinational banks. The results indicate that workers in local banks clearly earn wage premiums for English language skills. Workers in multinational banks have on average better English skills and higher salaries than workers at local banks, but there is no clear relationship between English skills and salary for this group of workers.

Keywords: language skill, English, bank, wage, Thailand, multinational

Introduction

As economies around the world are becoming increasingly internationally-integrated and as advances in technology make international

communication easier, the use of English in the workplace is on the rise. More than ever, employees must use English to communicate with foreign customers, business partners, and colleagues. In support of this, a survey by Global English (2010), including 26,000 employees in international corporations whose mother tongue was not English, found that 55% used English every day at work and only 4% did not use English at all in their jobs.

In Southeast Asia especially, English is poised to become more important in the near future. Coupled with steadily-increasing interactions with the rest of the world, as the ASEAN Economic Community (AEC) begins to open up, the region's 625 million people will begin to interact with each other more than ever before. This will likely include increased trade, investment and movement of skilled labor throughout the region. English has been designated as the official language of ASEAN, and should also be the natural choice for communication between people of the 10 countries in the association.

Despite the increasing importance of English, a number of authors have observed that there is a lack of English language skills in some Southeast Asian countries. Chia (2011) and Saraithong and Chancharoenchai (2012) have singled out Thailand among ASEAN countries as having an especially-large shortage. In the English Proficiency Index calculated by English First (2014), Thailand ranks 48 out of 63 countries - well below regional neighbors such as Malaysia (12), Singapore (13), Indonesia (28) and Vietnam (33).

There has been significant interest in the human capital literature about the wage returns to language skill. However, most of these studies have focused on the returns to English skill for immigrants in countries where English is the primary language, such as the US (Rivera-Batiz (1990), Park (1999), Fry and Lowell (2003), Bleakley and Chin (2004), Chiswick and Miller (2010)), Canada (Carliner (1981), Boyd and Cao (2009)) and the UK (Leslie and Lindley (2001), Dustmann and Fabbri (2003)), or in countries where a substantial portion of the population speaks English, such as South Africa (Levensohn (2007), Cornwell and Inder (2008), Posel and Casale (2011)) and India (Azam, Chin and Prakash (2010), Chakraborty and Kapur (2016)).

As the Thai economy becomes more internationalized, workers in Thai firms will have to use English more often and multinational firms, which are more likely to use English as a primary internal language, will also enter the market. As English skill is scarce in Thailand and multinational firms would seem to have a greater need for employees with English skill, we may expect that the wage returns to English skill will be higher for employees in multinational banks than in local banks. This study also investigates whether this is the case.

There have still been no studies which have measured the wage returns to English language skill in Thailand or even in Southeast Asia. This study provides the first insights into the wage returns to English skill in Thailand and in Southeast Asia, and the first comparison of the differential returns to English skill in local firms and multinational firms.

1.2 Literature Review

Many studies on the wage returns to language skill have investigated the returns to English-language skill in countries where English is the dominant language, such as in the USA, Canada and the UK. In the USA, Chiswick and Miller (2010) found that wages increase with the worker's English skill, with the skill requirements of the job, and with the interaction of the two (positive returns to good job-matching). While this premium is large for native-born Americans, it is even larger for immigrants to the USA. Chiswick and Miller (2009) found that immigrants to the USA were more likely to obtain jobs commensurate with their level of education when they had higher levels of English skill. This reinforces the idea that language skill is a kind of complementary human capital that augments the returns that workers can earn from education.

In the UK, Dustmann and Fabbri (2003) found that immigrants who were proficient in English had on average 20% higher earnings than those who were not proficient in English. Moreover, immigrants who were proficient in English were 22% more likely to be employed than non-proficient immigrants. In Canada, Boyd and Cao (2009) found that immigrant women who could speak English fluently earned about 60% more than immigrant women who spoke English at the lowest level on the study's measurement

scale. Fluent immigrant men earned wages 80% higher than those who spoke little English.

A number of other studies have investigated the returns to skill in the dominant language in non-English-speaking countries. These studies have found premiums of 42% for fluency in Mandarin Chinese in China (Gao and Smyth, 2011), 25% for fluency in Spanish in Bolivia (Chiswick, Patrinos and Hurst, 2000), and 35% for proficiency in Hebrew in Israel (Berman, Lang and Siniver, 2003).

A third set of studies has examined the returns to English skill in countries where English is used extensively for internal communication, though most people do not speak the language as a mother tongue. In studies on South Africa, Levinsohn (2007) found that the wage premium for English proficiency was 25% in the year 2000. Posel and Casale (2011) found that African men who had completed post-secondary education and were proficient in English could earn 97% more than African men who had completed post-secondary education but were not proficient in English. In India, Azam, Chin and Prakash (2010) found that compared to men who spoke no English, men who spoke fluent English earned 34% more per hour while men who spoke a little English earned 13% more per hour. Furthermore, they found workers with more experience and education earned higher returns from English skill.

A final set of studies have examined the returns to English skill in countries where English is used primarily for international business. Toomet (2011) found that Russian immigrants in Latvia and Lithuania earned up to a 25% premium for proficiency in English. In Hong Kong, Lui and Suen (1998) found that secondary-school graduates who could speak English earned 23% more than those who could not. Meanwhile, university graduates who could speak English earned 105% more than university graduates who could not. Finally, Guo and Sun (2014) found that recent university graduates in China earned a 3.3% higher starting salary for a one-standard-deviation increase in score on a standardized English test.

Overall, studies generally find that fluency in the dominant language has a bigger positive effect on the wages of high-skilled workers and workers who must use the language often in their jobs. Studies that estimate the returns

using OLS tend to find a wage premium of around 15-20% for fluency in the dominant language (as compared with not being able to speak the language at all), but instrumental variable (IV) approaches find even larger premiums (up to 30-40%).

The second focus of this study is the differential wage premiums for English language skill in multinational firms versus local firms. While there have not yet been any studies that have addressed this question specifically, a few studies have looked into the overall pay differentials between multinational and local firms.

In Indonesia, Lipsey and Sjoholm (2004) found that multinational firms tended to pay higher wages than local firms, even after controlling for worker quality. Moreover, they tended to pay higher premiums for white-collar workers than for blue-collar workers. In Thailand, Ramstetter (2004) found that in general multinational firms tended to pay workers more than local firms. While there was some evidence that labor productivity was higher in multinational firms, the evidence of higher wages was stronger.

While it is perhaps more intuitively appealing that multinational firms would pay higher wages than local firms in developing countries (as multinational firms are likely to have more capital and more advanced technology than local firms), researchers have wondered whether multinational firms in developed countries would also pay higher wages than local firms. Doms and Jensen (1998) found that in the United States, multinational wages were in fact still higher than local firm wages.

1.3 Hypotheses

The first goal of the study was to obtain an estimate for the wage returns to English skill among professionals in Bangkok, Thailand. As English skill is rare and in-demand in Thailand, it is expected that there should be positive returns to English skill. The more interesting question is how large those returns may be. Studies of the relationship between language skill and wages have been generally hampered by two difficulties – the correlation of language skill with unobserved ability and error in the measurement of self-assessed language skill. This study has attempted to address these issues by gathering a broader range of data on educational achievement (described

in Section 2.3.2) and by giving respondents a detailed rubric through which to self-assess their language skill (described in Section 2.3.6).

The second focus of the study was to examine whether English skill earns higher returns for workers at multinational firms than at local firms. As multinational firms are more likely to have foreign staff and managers, and are also more likely to have business connections with other foreign firms, it is expected that English skills would be in higher demand and thus would earn higher returns at multinational firms.

2. Methods

2.1 Industry of Focus

To investigate the returns to English skill in general, and also the differential returns to English skill in multinational firms and local firms, the banking sector emerged as the ideal focus for the study. Firstly, it is one sector of the economy that clearly has a significant need for English language skills. According to a survey by English First (2012), banking and financial services was ranked 7th out of 19 sectors in terms of the extent to which English is used in the workplace. Since there is clearly a need for English in this sector and, as mentioned earlier, there is a scarcity of this skill in Thailand, it is expected that firms would offer a wage premium for English skills.

Banking firms need staff with English skills for a variety of reasons. First of all, many banks in Bangkok have some foreign customers for their retail banking services and they need staff who can communicate directly with them. Secondly, banking firms will likely need to deal with firms with some degree of foreign ownership when making loans. Finally, some banks may have foreign employees who speak English, or may need to use internal documents or make use of research written in English. In each case above, it is expected that multinational banks will have a greater need for staff with good English skills than local banks.

Overall, banking is a service industry that is heavily dependent on information. Banks must be able to negotiate and write contracts, to clearly inform customers about the services they offer, to persuade them to buy those services, and to provide ongoing support to current customers. Clear commu-

nication is vital to all these tasks, and as business continues to become increasingly international, more of this communication will need to happen in English at both multinational and local banks.

The banking sector was also an ideal choice because it has a good mix of multinational and local firms. The banking sector in Thailand, while heavily dominated by local Thai firms before the Asian financial crisis, has since then seen higher levels of foreign investment and entrance into the market by foreign institutions. In fact, the government encouraged this in order to stabilize the sector following the crisis (Menkhoff and Suwanaporn 2007). The banking sector in Thailand employs well over 150,000 people, with the biggest local banks such as Bangkok Bank and Kasikorn Bank employing over 20,000 people each. There is also a wide range of both local firms and subsidiaries of foreign firms in Bangkok.

For this study, local firms included banking institutions founded in Thailand. This included Bangkok Bank, Siam Commercial Bank (SCB), Krungthai Bank, Thanachart Bank, Krungsri Bank, Kiatnakin Bank, Thai Military Bank (TMB), Kasikorn Bank, Government Savings Bank (GSB), Islamic Bank of Thailand, and Bank of Thailand. Multinational firms included subsidiaries of foreign banks, such as Citibank, United Overseas Bank (UOB), Hongkong and Shanghai Banking Corporation (HSBC), Standard Chartered Bank, Bank of China, Mizuho Bank, Deutsche Bank, Tisco Bank, and Bank of Tokyo.

2.2 Survey Design and Distribution

As information on English skill is not yet collected in labor force surveys in Thailand, for this study a survey was used to collect an original data set to capture the English skills, wages and other control variables of respondents. Information was gathered on full-time, staff-level and management-level workers in both local and multinational banks in Bangkok. Contract workers and those in top management positions were excluded.

Research was conducted using both an online and paper-based survey. Before distribution, the survey was translated into Thai so that workers would be able to clearly understand it. The survey was translated into Thai by a

research assistant and was then checked over by two referees who were fluent in both Thai and English.

The online survey was prepared on Survey Monkey (www.survey monkey.com). The survey software allowed the researcher to send a unique link to each primary contact, which was a friend or acquaintance that the researcher knew personally and who either worked at a bank in Bangkok or had friends or acquaintances who worked at one.

Each primary contact could use the link fill out the survey (if they worked at a bank), and they could also distribute that link to their friends or colleagues who worked in banks in Bangkok (secondary contacts). After making primary contact with one person who worked in a bank, it was often easy to get them to fill out the survey. The convenience of the online survey made it easy for the primary contact to pass it on to secondary contacts who worked at the same bank or at other banks. However, this approach usually yielded fewer than five total responses through any single primary contact.

The online survey was anonymous, in that once someone received the link they could click on it to take the survey online. The respondent would then input their responses and those responses were submitted to the researcher directly. No identifying information was requested. This meant it was impossible to know which people who had been sent the survey had actually completed it, and it was thus impossible to follow up with those who had not completed it.

The initial plan was to focus on the online survey, with limited use of the paper survey only in cases in which it was requested. However, response rates for the online survey were generally low, while the paper-based survey achieved far higher response rates. Using the paper-based method, some primary contacts were able to provide up to 40 surveys from their colleagues and contacts.

The paper-based survey was distributed in a similar manner to the online survey. Copies of the survey and accompanying privacy envelopes were passed to a primary contact, who then passed the surveys on to secondary contacts who were working in banks in Bangkok. The secondary contacts then returned the surveys to the primary contact, who returned the surveys to the researcher.

2.3 Characteristics of Sample Data

Data were collected through the online and paper survey from August 2014 through May 2015. Through the online survey I obtained a total of 73 responses. All responses were complete, as the survey software had the capability to require that all fields were filled in before the survey could be submitted. Through the paper survey I obtained a total of 465 responses. Of these, 83 were dropped because key information was missing. A further 22 responses were dropped because the respondent was in the wrong industry or was not technically an employee of the bank (i.e. contractor). This left 360 responses from the paper survey.

The original sample size included a total of 433 observations. Of these, 4 were dropped since the respondents were top-level managers and thus were not a part of the target population. One other observation was dropped as the respondent gave themselves one of the lowest scores for self-assessed English although they reported some of the highest scores on the TOEIC and IELTS test. This was evidence of careless answering on the self-assessed English section.

The final sample included 428 observations. Of these 94 were obtained from workers at multinational banks. Banks included in this category were Citibank, UOB, HSBC, Standard Chartered Bank, Bank of China, Mizuho Bank, Deutsche Bank, Tisco Bank and Bank of Tokyo. 334 observations were obtained from local banks. The local bank category included observations from Bangkok Bank, Siam Commercial Bank, Krungthai Bank, Thanachart Bank, Krungsri Bank, Kiatnakin Bank, TMB, Kasikorn Bank, Government Savings Bank, Islamic Bank of Thailand, and Bank of Thailand.

2.3 Data Series Collected

In the following section, each variable is noted in all caps to match its name in the regression results that follow. This study collected the standard types of data that are usually obtained for Mincer-type wage regressions. As in most studies on wage returns, data was collected on respondents' sex (SEX), marital status (MARRIED), number of children (CHILD) and years of total work experience (EXP). The data used to capture some other standard

variables were collected using non-standard measures, and in such cases the data are described in greater detail below. The data used to capture non-standard variables, such as GPA and job type, are also described below.

2.3.1 Education

In the human capital literature, education is traditionally measured by the number of years the individual has attended school. However, most studies include sample populations comprised of people who have only primary education all the way up to people with PhDs. In these studies, there is enough variation in years of education that it makes sense to measure it as a continuous variable. In my study, however, most employees at banks had either bachelor's degrees or master's degrees, with some employees having PhDs. This meant there was little variation in years of education, so it would have been inappropriate to measure education as a continuous variable.

Instead, respondents were separated into a few different dummy categories. As nearly all respondents had earned at least a bachelor's degree, respondents were grouped by whether they had studied for their bachelor's degree at a normal Thai university (BANORMAL), at an elite Bangkok university (Chulalongkorn, Thammasart, Mahidol and Kasetsart) (BAEL ITEBKK), or at a foreign university (BAABROAD). I expect that students who have studied at elite Bangkok universities would have an average higher salary than those who have studied at universities in the base category, and I expect that those who studied for a BA abroad would have even higher average salaries.

To capture the returns to higher education in greater detail, data was also collected on whether respondents had completed a master's degree, and if so about what kind of program they had studied in. Respondents reported whether they had earned just a bachelor's degree (BAONLY), had earned a master's degree in a Thai-language program in Thailand (MATHTH), had earned a master's degree in an English-language program in Thailand (MATHENG), or had earned a master's degree in an English-language program abroad (MAABROAD).

It is expected that while companies would reward any employee who had earned a master's degree, those who had earned a master's degree in an

English-language program in Thailand would earn a higher premium, and those who had earned one abroad would earn an even higher premium. This premium would be in part because graduates of these programs would tend to have better English skills, and also because these programs are viewed as more prestigious by hiring officers.

2.3.2 Ability

The measurement of unobserved ability is an important matter in studies of the relationship between language skill and salary. This is because there is a positive correlation between English skill and unobserved ability. Individuals with high ability are likely to earn higher wages, and also to have better English skills. If a variable capturing ability is not included in the study, this would mean that some of the positive effect of ability on wage would be captured by the language skill variable, thus upwardly biasing the coefficient on language skill.

Some of the variation in unobserved ability is likely captured by the education choice variables described in Section 2.3.1. However, a large variation in ability can still remain among individuals even after grouping them by the type of university they attended. As the survey instrument was purpose-built, the study was able to collect further data related to unobserved ability which has not been included in other studies on the topic – undergraduate university GPA. Respondents who earned a higher undergraduate GPA should on average have higher ability. Thus, inclusion of GPA in the regressions allows for a more accurate estimate of the coefficient on the language skill variable.

A number of previous studies have found that GPA has an important influence on wage. Chia and Miller (2008) found that in Australia, a student with a top GPA earned a significant wage premium over a student with a middling GPA. The difference was equivalent to about 3 extra years of education. Hershbein (2013) found that the wage returns to GPA were positive for all groups, but for workers who attended a selective university the wage returns to GPA are lower than for students who attended a less-selective university.

2.3.3 Environment

The environment within which a worker grows up can also impact the wages they eventually earn. People who grew up with better-educated or higher-income parents may be more likely to earn higher wages in the future for a number of reasons. They may have higher ambitions than people born into lower-income families. Their families may have better social connections, which could give them access to better work opportunities. Furthermore, their parents may invest in extracurricular courses or activities that would further build the child's human capital in addition to their normal schooling.

As most of the workers in this study grew up in a time when men were the primary breadwinners of the family, it was sufficient to ask for the father's level of education in order to get an estimate of the environment in which the respondent grew up. The survey asked respondents about the highest level of education their father had completed as a proxy to measure the environment in which the respondent grew up.

As respondents' fathers had a range of educational achievement, from less than a high school diploma all the way up to a PhD, this was separated into two dummy categories – one category for fathers who had completed primary school, lower-secondary school or upper-secondary school and another category for fathers who had completed studies for a technical certificate, a bachelor's degree, a master's degree or a doctorate degree. The variable ENV was set equal to one if the respondent's father fell in the second category (higher education), and zero if the first category.

2.3.4 Job Type

The particular job category in which a person works may also impact their wages. There is a wide range of job functions within any bank, but we can expect workers at management level (MANAGER) to earn higher salaries than workers in other positions. Managers have to engage in the widest variety of tasks in their work and must take on higher levels of responsibility than workers in other positions, so we can expect that they will in general earn a wage premium.

Respondents were also grouped into one category for front-office workers (FRONTOFFICE), such as bank tellers, loan officers and customer

relationship managers, and back-office workers (BACKOFFICE) such as accountants, analysts and lawyers.

2.3.5 Main Office or Branch

Another important factor may be whether the respondent works at the bank's main office in Bangkok, or in a branch. It is likely that employees of the bank's main office (MAIN) would be higher-paid than employees at the branches within Bangkok. Some of this would likely be because higher-skilled and better-educated workers are selected to work at the main office, and thus this variation would be picked up by the appropriate variables. However, the main office may in general require workers with more specialized skills (such as lawyers or computer programmers) that allow workers to earn higher returns that those predicted only by their years of education and GPA.

2.3.6 English Skill

The method of measuring English skill is an important matter. For practical reasons, it was impossible to conduct an objective measure of English skill for each respondent in this study. However, asking respondents to self-assess their language skill can introduce biases. Charette and Meng (1994) found that people tend to overestimate their language proficiency when asked to give a self-assessment. This leads to a downward bias in the coefficient on the language skill term obtained through an OLS regression. This is because if people claim they have high levels of language skill when in fact they do not, their employer should be able to more objectively assess their lower language skill and thus would not offer them such a high wage.

Previous studies may have encountered bias in their measures of self-assessed language skill due to data obtained from vague survey questions. Studies have mostly made use of national survey data which collected data on language skill along with many other kinds of data. The self-assessment often included just a single question, such as "How well can you speak English?" Respondents then usually selected whether they could speak English "not at all," "not very well," "well" or "very well." Authors have usually used responses to these questions to construct dummy categories in which, for example, respondents who said they could speak English "well" or "very well" were included in the English-proficient category.

Questions of this type can present problems for respondents, who may be unsure whether to compare their language skill to other people in their country or to native speakers. For example, someone may speak English well compared to their peers, but rather poorly compared to native speakers or working professionals. Respondents may also have different opinions of what level of proficiency is required for them to say they can speak English "well."

Furthermore, people can have varying levels of English skill across the four basic language skills – reading, writing, listening and speaking. A single question does not allow respondents to report the different facets of their language skill, and could also bias estimates of language skill. For example, people with strong speaking skills but poor writing skills may be unsure how to classify themselves.

This study attempted to address the problem of bias in self-assessed measures of language skill by giving respondents a detailed rubric through which to assess their language skill. Respondents should be able to more accurately evaluate how well they can perform specific language tasks, such as reading a newspaper article in English or conducting a brief business phone call in English, rather than just estimating their overall level of skill. By asking respondents to tell how easily they could accomplish certain tasks, we don't have to worry that they will be unsure about which reference group or level of skill they should compare themselves to when they decide if they speak English "not very well," "well," or "very well."

The language skill assessment included twenty questions about the respondent's ability to complete a variety of language tasks in English. There were 20 multiple-choice questions in total, with five questions about each of the four skill areas – reading, writing, listening and speaking. Respondents were asked to answer questions about how easily they could complete various language tasks, from reading a short business email to giving a presentation in English. Their answers were scored depending on how easily they said they could perform each task – easily (4 points), somewhat (3 points), with some difficulty (2 points), with difficulty (1 point). Their scores for each question were then summed, giving a range of scores from 20 (answering 1 on every question) to 80 (answering 4 on every question).

After arriving at a total score for each respondent, three dummy categories were then created. ENGBEGINNER included respondents with a total score from 20-39. ENGPREINTER included scores from 40-59, and corresponds roughly to a pre-intermediate level of English skill. ENGUPPERINTER included scores from 60-80, and corresponds roughly to intermediate or higher English skill. These dummy categories were created because we are not so interested in knowing the marginal increase in salary due to a one-point increase in a self-assessed English measure. We are really interested in knowing how much higher salary someone might earn as a result of having a pre-intermediate or intermediate level of English skill, compared to no English skill at all.

The robustness of the self-assessed English score was measured by correlating self-assessed English score against TOEIC score for the subset of the sample that had taken the TOEIC test (73 respondents). The correlation coefficient between the two measures was found to be 0.29, which is not particularly high. To some extent this calls into question the respondent's ability to assess their own language skill. However, another reason for the rather low correlation coefficient could be that some of the respondents may have taken the test a few years earlier, and their English skill may have gotten better in the time since they took the test (if they use English often at work) or worse (if they have used English rarely since taking the test).

As the responses were later categorized into three dummy categories based on self-assessed English skill, it is hoped that people would generally end up in the appropriate categories, even if their self-assessed score is not totally accurate. It should also be noted that this measure is still no less reliable than measures of self-assessed language skill used in nearly all other studies on the subject.

2.4 Data Summary

Table 1. Data Summary

	Full Sample		Younger Workers (EXP<=10)		Older Workers (EXP>10)	
	Local Banks	Multinational Banks	Local Banks	Multinational Banks	Local Banks	Multinational Banks
Observations	334	94	244	75	90	19
SEX	.					
Male	.29	.29	.26	.25	.36	.42
Female	.71	.71	.74	.75	.64	.58
MARRIED						
Married	.27	.15	.15	.09	.58	.33
Single	.73	.85	.85	.91	.42	.67
SAL (baht/month)	33,722	42,172	26,936	37,350	51,242	58,048
	(18,730)	(21,884)	(12,585)	(19,193)	(20,595)	(23,060)
EXP (years)	9.3	7.3	5.1	4.7	20.3	15.9
	(7.9)	(5.6)	(2.9)	(2.8)	(6.0)	(3.53)
POSITION						
Front Office	.50	.14	.54	.15	.40	.09
Back Office	.39	.59	.40	.63	.35	.44
Manager	.11	.27	.06	.21	.25	.47
MAIN	.					
Main Office	.40	.80	.36	.78	.51	.83
Branch	.60	.20	.64	.22	.49	.17
UNIV						
Normal Thai Uni	.74	.42	.69	.36	.88	.61
Elite Bangkok Uni	.25	.56	.31	.61	.10	.39
Foreign Uni	.01	.02	.00	.03	.02	.00
MA DEGREE						
MA Abroad	.08	.15	.09	.17	.05	.08
MA in Thailand (ENG)	.02	.10	.02	.13	.01	.00
MA in Thailand (Thai)	.27	.27	.24	.23	.35	.38
BA Only	.63	.49	.64	.47	.59	.54
BAGPA	2.92	3.0	2.95	3.07	2.85	2.78
	(.37)	(.44)	(.36)	(.39)		
English Skill					.28	.09
ENGBEGINNER	.17	.04	.10	.03	.45	.33
ENGPREINTER	.45	.35	.45	.35	.27	.58
ENGUPPERINTER	.39	.61	.45	.62		

Note: Standard errors presented in parentheses.

3. Results

Table 2. Regression Results

	(1) Full Sample	(2) Full Sample with EXP<=10	(3) Local Bank with EXP<=10	(4) Multinational Bank with EXP <=10
ENGPREINTER	0.061	0.161***	0.157***	
	(-0.051)	(-0.062)	(-0.06)	
ENGUPPERINTER	0.071	0.227***	0.195***	0.111
	(-0.053)	(-0.063)	(-0.061)	(-0.089)
EXP	0.062***	0.077***	0.023	0.235***
	(-0.007)	(-0.023)	(-0.025)	(-0.053)
EXP2	-0.001***	-0.001	0.003	-0.014***
	(0)	(-0.002)	(-0.002)	(-0.005)
MULTINATIONAL	0.231	0.122***		
	(-0.188)	(-0.042)		
MAIN	0.037	0.018	0.036	-0.093
	(-0.035)	(-0.038)	(-0.043)	(-0.101)
FRONTOFFICE	-0.018	0	-0.019	0.097
	(-0.037)	(-0.038)	(-0.04)	(-0.106)
MANAGER	0.282***	0.338***	0.274***	0.370***
	(-0.047)	(-0.058)	(-0.078)	(-0.095)
BAELITEBKK	0.125***	0.114***	0.096**	0.145*
	(-0.036)	(-0.036)	(-0.041)	(-0.08)
BAABROAD	0.232	0.399*		0.358
	(-0.161)	(-0.206)		(-0.237)
BAGPA	0.103***	0.154***	0.157***	0.097
	(-0.041)	(-0.045)	(-0.05)	(-0.098)
MATHTH	0.105***	0.114***	0.104**)	0.143
	(-0.037)	(-0.041)	(-0.043)	(-0.104)
MATHENG	0.125	0.119	0.169	0.12
	(-0.082)	(-0.079)	(-0.115)	(-0.121)
MAABROAD	0.403***	0.452***	0.453***	0.351***
	(-0.054)	(-0.054)	(-0.065)	(-0.108)
SEX	0.054*	0.058	0.082**	0.05
	(-0.032)	(-0.036)	(-0.039)	(-0.087)
MARRIED	0.064	0.06	0.097	-0.043
	(-0.052)	(-0.06)	(-0.066)	(-0.143)
CHILD	-0.026	-0.006	-0.008	-0.627**
	(-0.034)	(-0.048)	(-0.05)	(-0.241)
ENV	0.110***	0.095***	0.097***	0.104
	(-0.032)	(-0.034)	(-0.036)	(-0.083)
Observations	428	319	244	75
R-squared	0.664	0.638	0.598	0.743

Description: Regression coefficients presented on first line, standard errors presented in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

(1) – Regression Results including the full sample; (2) – Sample with EXP <=10; (3) Local bank workers with EXP <=10; (4) Multinational bank workers with EXP <=10

3.1 Regression Results – Full Sample

The regression results including the full sample of 428 observations are presented in column 1 of Table 2. Of most interest, the two English skill variables had positive coefficients, but were not statistically significant. The coefficient on MULTINATIONAL was also positive, but not significant. For this regression, then, the two pathways by which English skill would seem to lead to higher earnings (through the English skill variable or indirectly through increased likelihood of working for a multinational bank) did not show a significant effect.

The lack of a statistically-significant positive coefficient on the MULTINATIONAL variable is surprising, but it remains true that on average workers in multinational banks have higher salaries than workers in local banks. MULTINATIONAL may not have been significant because the differences in earnings are largely explained by other factors. For example, we can see from Table 1 that multinational banks are more likely to hire people who have graduated from elite Bangkok universities, people who have earned master's degrees, people who have higher undergraduate GPAs, and people with higher self-assessed English skills. As we would expect higher salaries to also be correlated with those variables, then they may to some extent capture the positive returns to working for a multinational bank.

Another possible explanation is that MULTINATIONAL may not have been significant because of some characteristics of the data collected. Again from Table 1, we can see that in the sample the workers in multinational banks were more likely to be managers and were more likely to work for the main office than a branch office, so it's possible that if there is in fact a wage premium for working with a multinational bank, the effect was captured to some degree by those variables instead.

The variables capturing education and ability did, however, find significant effects. Studying for a BA degree at an elite Bangkok university was found to be related to 13% higher salary than studying at a normal Thai university. Earning an undergraduate GPA of one point higher (the jump from 2.5 to 3.5, for example) was related to an estimated 10.3% higher salary. Studying for a master's degree in a Thai-language program in Thailand was

related with a 10% higher salary. Studying for a master's degree abroad was related to 40% higher salary, though the sample group in this case was fewer than 10.

3.2 Regression Results – Younger Workers

While the results from the first regression did not show a very significant effect of English skill on salary, I sought to test a further hypothesis – that younger workers enjoyed a larger premium for English-language skills than older workers. If English skills have become more important in the past 10 years, their effect may be more pronounced for younger workers as they could play a bigger part in hiring and promotion decisions for younger workers. On the other hand, older workers may have begun to climb the corporate ladder in a time when English skills were less important, and may therefore have been able to reach higher-salaried positions despite lower levels of English skills. The summary statistics for younger workers are presented in columns 3 and 4 of Table 1 above.

The results from this regression, including only respondents who had 10 years or fewer of work experience, are presented in column 2 of Table 2. Interestingly, we find that most of the variables that were significant in the first specification are also significant in the second specification, and the effect is also quite similar. Undergraduate GPA appears to be a more important determinant of wage for younger workers than for older workers.

However, we do see that both ENGPREINTER and ENGUPPER INTER become positive and highly significant in this specification, with pre-intermediate English related to about 16% higher salary and intermediate level English related to about 23% higher salary. Compared with the first regression, these results indicate that English skill has become an important factor in determining the salary of younger workers in banks.

3.3 Regression Results – Younger Workers in Local Banks

I next tested whether the returns to English skill were higher for workers in multinational banks than for workers in local banks. I hypothesized that workers in multinational banks should enjoy a higher premium for

English language skill, as they are more likely to need to communicate often in English with coworkers and clients. First, the results for younger workers (with 10 years or fewer or work experience) who work at local banks are presented in column 3 of Table 2.

For the most part, the results from this regression are similar to the earlier regression covering all younger workers. However, there are a few notable differences. First of all, in this sample of 244 workers, the EXP variable appears to be positively related to salary, but is statistically insignificant – a surprising finding. BAGPA remains strongly significant, and the coefficient is slightly higher than in the full sample with younger workers.

In this sample, the English skill variables have become highly significant. The results show that workers with a pre-intermediate to intermediate level of English skill would be expected to earn a 16% higher salary than workers with a low level of English skill. Those with an intermediate to upper-intermediate level of English skill would be expected to earn a 19% higher salary.

These results indicate that local banks reward workers with higher English skill. As local banks may have fewer workers with high English skill, it may be the case that those who do have high English skill tend to be rewarded significantly, and may be more likely to earn pay rises or promotions due to their language skills.

3.4 Regression Results – Younger Workers in Multinational Banks

The regression was next run with workers in multinational banks with 10 years of experience or fewer. This regression included a total of 75 respondents. The results are presented in column 4 of Table 2.

This regression shows a number of differences with the regression including younger workers at local banks, though fewer variables are significant owing to the smaller sample size. In this sample, EXP was highly significant with one year of experience leading to an expected 23% higher salary. Most other variables were reasonably similar to their estimates in the other regressions and thus shall not be commented on again here.

The coefficients on the return to English skill are interesting. ENGBEGINNER was dropped as the base case in this specification because there were only a few respondents remaining in the category. ENGPREINTER was thus used as the base category. When ENGUPPERINTER was included as a regressor, the variable did have a positive coefficient though this was not statistically significant.

Keeping in mind that workers at multinational banks do tend to have a higher level of English skill than workers at local banks, these results may indicate that while multinational banks screen applicants based on English skill, English skill may not be as strong a criterion for pay rises within the organization. Since multinational banks may require a higher level of English skill from all workers, English skill may not be an important factor in determining promotion or pay rises. However, since English skill is rarer at local banks, it may play a bigger role in decisions regarding pay rises and promotions, and thus may earn a higher wage premium.

4. Discussion

The results of the study have confirmed the findings of many other studies on the subject, which have found that there is indeed a positive wage premium for English skill. With a wage premium of 20-23% for workers with intermediate English or higher, the premium is in line with most other studies which also find a wage premium near this range. As Thailand has a large degree of international economic activity and as English skill is comparatively scarce in the country, we expected to find a wage premium for English skill. The finding that the wage premium is large (in fact, larger than the wage premium from earning a master's degree) should hopefully help convince people in the country to invest resources in building this skill.

However, the study did not find clear evidence of a wage premium for all kinds of workers – just for younger workers. Though few studies have examined whether there is a differential in wage premium for workers of different ages and levels of experience, Azam, Chin and Prakash (2010) found that older males in India earned a higher premium for English skill than younger males did.

According to theory, it would seem to make more sense that older workers would earn a higher premium for English skill than younger workers. Work experience and education are both forms of human capital, and language skills like English are useful because they help the worker make use of their human capital more effectively in a wider range of situations.

One reason that older workers appear not to earn a wage premium for English skill could be that older workers began to climb the corporate ladder at a time when English skill was less important. This could have allowed workers with poor English skill to set out on the track toward management positions. If banks are conservative organizations that tend to promote people along a career path based partly on years of service in the company, then older employees with poor English skills could have still been promoted to higher-salaried positions.

On the other hand, the finding that there are significant wage premiums for English skill for younger workers could be evidence that English skill has become more important as a hiring and promotion decision in the past ten years. Younger workers with better English skills may be able to get on the fast track to promotion within the company more easily than those with poor English skills.

The second objective of the study was to investigate whether there are differential returns to English language skill for workers at multinational banks versus local banks. The original hypothesis was that multinational banks would offer a higher wage premium for English skill because they are more likely to have a strong need for workers with these skills.

The results obtained did not clearly support this hypothesis, though there are interpretations of the data that can support it. Regressions found that workers in local banks do enjoy a clear wage premium for English skill of around 16% for pre-intermediate English skill and up to 23% for intermediate English skill. However, workers at multinational banks were not definitively shown to earn a wage premium for higher levels of English skill.

We must keep in mind that workers in multinational banks are selected based on their English skill to a greater extent than workers in local banks. Workers at multinational banks have on average a higher level of English skill

than workers in local banks (though they also are more likely to have attended an elite Bangkok university and to have earned a master's degree). Workers in multinational banks also have higher average salaries than workers at local banks. Among workers with 10 years of experience or fewer, those at multinational banks earn 37,350 baht/month on average, while those at local banks earn 26,936 baht/month.

While the data may not show that multinational banks reward employees with higher salaries based on their English skill, this may be the case because employees at those banks already have a generally high level of English skill, such that other factors emerge as more important when making decisions that affect compensation. However, given that high English skill gives one a better chance at landing a comparatively high-paying job at a multinational bank, it's clear that workers at multinational banks reap a substantial reward for their English skill.

The higher average salaries at multinational banks give an idea about how much the return is to workers for their higher English skill. However, when interpreting the results, we should consider that responses from multinational banks were more likely to come from the main office than were responses from local banks. Among workers with fewer than 10 years of experience, 36% of local bank respondents were at the main office, whereas 78% of multinational bank respondents were at the main office. As most multinational banks have few branch offices, this is unsurprising. However, as workers at the main office have on average higher salaries than workers at branch offices, then part of the 10,000 baht/month differential in average salary between workers at multinational banks and local banks could be accounted for by the fact that workers in the sample from local banks were more likely to have been drawn from branch offices. This would to some extent decrease the implicit bonus for high English skill that workers receive through getting a job at a multinational bank.

The results of this study bring up the question of whether younger workers earn a higher wage premium for English skill in general, or whether this result is peculiar to Thailand only or to the banking sector in Thailand. In Thailand and other countries in Southeast Asia, it could be the case that since English has begun to rise in importance in recent years, older workers in

larger organizations in which workers have fairly structured career paths would not see as great an influence of English skill upon salary. This could be because older workers began to move up the ranks into senior positions at a time when English skill was less important. If this is the case, then we should expect that in coming years we would begin to observe wage premiums for both younger and older workers, as workers who have begun their careers in a more internationalized economy move up the ranks.

This study has lent further support to the idea than English skills are rewarded in the labor market, and has given the first estimates of the magnitude of those rewards in Thailand. It has yielded results showing that younger workers receive greater wage premiums than older workers, which is somewhat counter-intuitive if we believe that language skill merits wage premiums because it allows workers to make greater use of their human capital. The absence of observed wage premiums for older workers may be evidence of a greater lag effect for older workers than for younger workers in the time it takes the labor market to workers for skills that have recently become important.

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Appendix

Table 3. Regression Results (Workers with EXP >10)

	(5) All Workers With EXP > 10
ENGPREINTER	-0.01
	(0.094)
ENGUPPERINTER	-0.158
	(0.107)
EXP	-0.001
	(0.041)
EXP2	0.001
	(0.001)
MULTINATIONAL	0.049
	(0.110)
MAIN	0.117
	(0.088)
FRONTOFFICE	-0.047
	(0.101)
MANAGER	0.172*
	(0.095)
BAELITEBKK	0.195*
	(0.112)
BAABROAD	0.326
	(0.272)
BAGPA	-0.086
	(0.097)
MATHTH	0.036
	(0.083)
MATHENG	0.271
	(0.392)
MAABROAD	0.188
	(0.173)
SEX	0.052
	(0.077)
MARRIED	0.041
	(0.113)
CHILD	-0.035
	(0.061)
ENV	0.149*
	(0.081)
Observations	109
R-squared	0.391

Description: Regression coefficients presented on first line, standard errors presented in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

(1) – Regression Results including the full sample; (2) – Sample with EXP <=10; (3) Local bank workers with EXP <=10; (4) Multinational bank workers with EXP <=10