NEXUS BETWEEN ENGLISH LANGUAGE PROFICIENCY AND ECONOMIC GROWTH: AN EMPIRICAL ANALYSIS FROM SELECTED ASIAN COUNTRIES

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Abstract: This study highlights the empirical nexus between English Language Proficiency (ELP) and economic growth for 16 Asian countries. The assumption of this paper is that the level of ELP is a part of human capital. It proposes that the ability to avail innovative information and to boost the level of knowledge is positively related to ELP. Consequently, those countries which have highest level of ELP are likely to grow faster than those which have low level of ELP. The empirical results of this study show a positive correlation between ELP and economic growth for the selected sample. The ELP not only encourages Foreign Direct Investment (FDI) but is also positively associated with Human Development Index (HDI) and provide helpful environment for FDI. Thus, it is argued that the increase in ELP inspires more knowledge to accelerate economic growth and development.

Keywords: English Language Proficiency (ELP), Economic Growth, Foreign Direct Investment (FDI) and Human Development Index (HDI)

1. Introduction

Researchers from various disciplines have argued that language can play an important role in economic growth and development of a country. According to Romer (1990), Grossmann and Helpman (1991), and Jones (1995), it is generally accepted that the increase of knowledge is positively associated with economic growth. While on the other hand, researchers such as Nettle (2000) find no clear evidence in this regard and opine that the empirical evidence leftover inconclusive. We know that knowledge diffusion is growing at a faster rate and the contribution of developed nations is very high in the stream of knowledge as compared to the developing countries. Therefore, to use the new and emerging knowledge for the betterment of general masses English Language Proficiency (ELP) is very important to utilize the prevailing knowledge and technologies without time lag. It is because the rate of dispersion of the new knowledge significantly depends upon economy's absorption capacity of new knowledge and the absorption capacity of new knowledge in the short run completely depends upon ELP.

Consequently, high will be the English proficiency; high will be the absorption capacity of knowledge (see Coe and Helpman, 1995; Falvey *et al* 2002; and Falvey *et al*, 2004).

The absorption of new knowledge greatly depends on English proficiency due to the fact that on average most of the new technical knowhow is emerged from English speaking countries (developed and high income countries). To understand such new knowledge and its appropriate on time application, one has to be proficient in English language. Therefore, it could be said with confidence that English as a language has a special status for promotion of knowledge and transformation of technology around the world. It is known that majority of the developing countries enjoy spillover and benefits of the knowledge produced by developed countries (Caselli & Coleman, 2000; and English being international language is getting popular all over the world and majority of the new knowledge is going to be preserved in this language. Thus, English proficiency is one of the basic determinants for rapid utilization of the new knowledge across the globe. Moreover, English language is the most effective instrument and easy way to access the new knowledge since majority of the academic publications are produced in English language. English is the language of global trade and venture. For instance, with the rising economic strength of China, the use of English language is also dramatically increased in China for business purposes. This clearly indicates the importance of English language for new ventures and businesses. Billions of people around the world are trying to learn English for self-improvement and as an economic necessity because English proficiency helps to get job nationally as well as internationally. It is easy for those people who born in English speaking countries but people from emerging economies such as China, Russia, Pakistan, India and Brazil are trying hard to learn the language.

Machines usually come with English instructions and manuals. Hence, ordinary illiterate workers are not able to use these machines effectively for production purpose because of the lack of a basic knowledge of English language. It is therefore, Keller (2002) suggests that the language of communication must be English in Germany and Italy among engineers in R&D. Sometimes when new creations and discoveries are translated to local languages from English then most of the times it creates further problems for the non-English speakers and users owing to the lack of command over English language, culture differences and miss-understating of terminology while translating English into any local language. Furthermore, the transaction costs are lower in countries with a common language that facilitates communication among people, besides, the common language of communications; produce a lot of positive externalities vice versa. Therefore, to minimize the negative effect of the differences in languages, the best strategy is to introduce a common language of communication as English.

In the contemporary world credit transaction is the lifeline of today's business. It has a vital role to encourage aggregate demand and boost all macroeconomic variables such as investment, consumption, saving, employment and productivity etcetera. However, there are two critical determinants of credit transaction i.e. technology and communication. Hence, to facilitate a productive credit transaction common language is a basic requirement. Network externalities can occur when society, economy, and a country converged to the use of one language. Such types of externalities may be easier in adoption of new knowledge to encourage trade and commerce among nations.

Generally, English language in developing countries is considered the language of elite but in the last 20 years the role of the English language has changed significantly due to globalization, urbanization, and the use of internet. Presently, English language is considered as economic

benefits for the knowledge and getting a job. It is because English is the basic requirement for majority of jobs especially in developing countries.

The rest of the study is organized as follow: whereas the next section highlights the methodology and data of the study while forthcoming sections of the study offers the empirical results and conclusion respectively.

2. Methodology and Data

Before the introduction of any type of methodology, it is important to give detail of the variables which has been used in empirical analysis of the study. Thus, to capture the effect of economic growth GDP Per Capita Income (PCI) is used as proxy for economic growth. However, to compute the PCI of a country the total real GDP is divided by the total number of inhabitant living in that country. PCI represent the average income level of that specific area and it is not compulsory that all people get the same amount of money per year.

The Education First developed an index in the result of the global language survey which is called the "English Proficiency Index (EPI)". This index ranks the world countries on the basis of adult English speaking skills and proficiency. Presently, the index was estimated for 70 countries but with the passage of time it (the index) is including more countries. Therefore, to estimate the ELP of a country we have used the proxy of EPI. Similarly, to capture the outcome of human capital we used Human Development Index (HDI) as proxy. The HDI is a compound index concentrating on three basic dimensions of human development: a) life expectancy at birth; b) years of schooling and expected years of schooling; and the ability to achieve a decent standard of living; and c) measured by gross national income per capita (Human Development

Report, 2015). This study selected the sample for 16 countries, the complete detail of the countries are reported in appendix 01.

Table01: Details of the Variables

Variable	Proxy	Data Source
Real Per Capita Income (PCI)	Economic growth	International Monetary Fund World Economic Outlook (2015)
Human Development Index (HDI) of respectively country	Haman Capital	International Financial Statistics (IFS) database, IMF
English Proficiency Index	English Language Proficiency	EF English Proficiency Index. Comparing English skills between countries. EF EPI. Ef.com.

Table 02: Descriptive Statistics

Country	EPI	HDI	PCI ($)	FDI stock (Millions of dollars)
Singapore	63.52	0.912	23,053	912,355
Malaysia	60.70	0.779	9,548	133,767
Philippines	60.33	0.668	2,991	57,093
India	57.30	0.624	1,719	252,331
South Korea	54.87	70.3	27,633	182,037
Vietnam	54.06	0.666	2,164	90,991
Indonesia	52.94	0.684	3,636	253,082
Japan	51.69	0.891	37,304	NA
China	50.94	0.727	8,262	1,085,293
Pakistan	48.78	0.538	1,474	30,892
Kazakhstan	47.42	0.788	7,138	NA

Thailand	47.21	0.726	5,662	199,311
Sri Lanka	46.58	0.757	3,870	10,511
Mongolia	42.77	0.727	3,704	16,693
Cambodia	39.48	0.720	5,623	13,035
Laos	38.45	0.575	1,921	3,630

Source: Human Development Index (HDI)United Nations Development Programme (2015), GDP Per Capita Income (PCI) by International Monetary Fund World Economic Outlook (2015) and Foreign Direct Investment (FDI) by Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

Table 02 gives us rough idea that there is positive association between ELP, PCI, and HDI. The leading economies of Asian, both in terms of economic growth and PCI, are Japan, Singapore, Malaysia, China and South Korea and they all showed a quite good indicator of English proficiency. Moreover, countries such as Indonesia and Vietnam have shown significant gains in proficiency of English as the follow-up study in 2007 began. India and China also indicate real improvements in abilities of English language as the EPI 2015 showed. On the other hand, the English proficiency of the countries such as Thailand, Sri Lanka, Mongolia, Cambodia and Laos is not that much high and therefore, they are enjoying moderate level of PIC. Additionally and for further clear and concrete investigation, we estimate the correlation coefficients to measure the strength of the relationship between English proficiency, PCI, HDI and FDI.

3. Results and Discussion

For the purpose of achieving the objective of this study, the partial correlation coefficients between EPI, PCI, HDI and FDI has estimated. And to test the statistical significance of these correlation coefficients, the “t-test” has been applied respectively. Table 03 offers the results of the correlation coefficients which show that there is a very strong correlation between EPI and

FDI following by PCI and HDI. This is because English skills play an import role to fascinate more FDI and foreign investors.

Tables 03: Empirical Results

	Correlation coefficient	P-value
r_{y,x_1}	0.5621***	0.0500
r_{y,x_2}	0.4718**	0.0510
r_{y,x_3}	0.6012**	0.0500
Where: ****p<0.01, **p<0.05, * p<0.10*		
r = Correlation coefficient; $0 \le r \le 1$; X_1 = Real Per Capita Income (PCI), X_2 = Human Development Index (HDI), X_2 = Foreign Direct Investment (FDI), Y = English Proficiency Index (EPI) of the respective country		

In table 03 the correlation coefficient of PCI and EPI is 0.5621 which shows that the correlation between EPI and PCI is quite stable and robust. Moreover, the value of the correlation coefficient is statistically significant at one percent of critical level. The positive correlation indicates that those countries which have high level of ELP are enjoying high PCI and stable standard of life. Besides the life expectancy, social and living conditions are also much better and hygienic in the countries which have high EPI vice versa. Furthermore, the correlation between EPI and HDI is reasonable. The strength of the relationship is 0.4718 which is statically significant. However, the high EPI countries are not falling below the benchmark of HDI. Similarly, the correlation between EPI and FDI is quite high, the value of correlation coefficient is 0.6012, which is statistically significant. It shows that those countries which have high level of ELP have more stock of FDI as well as attract more FDI.

4. Conclusion and Recommendations

The results of the study show that in case of the Asian countries there is strong association between ELP and economic growth. Similarly, ELP is also helps to attract more FDI to boost economic growth. Besides, ELP also helps to create a favourable environment for foreign investors. The relationship of English skills and HDI shows that ELP has significant positive relationship with human capital. As we know that the increases in stock of human capital further accelerate economic growth. Moreover, it is important to remember that although the study finds a positive relationship between ELP and economic growth for 16 Asian countries but this relation can vary for one type of empirical framework to another type of framework due to intermediation by a lot of extraneous variables. However, on the basis of our results, we can suggest that, it is important to invest more and more on ELP by providing training to the teachers for teaching English as a second language. Furthermore, it is also the need of the hour to set national standards for English training programs.

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Appendix 01: List of the selected Asian Countries			
S.no	**Country**	**S.no**	**Country**
1	Singapore	09	China
2	Malaysia	10	Pakistan
3	Philippines	11	Kazakhstan
4	India	12	Thailand
5	South Korea	13	Sri Lanka
6	Vietnam	14	Mongolia
7	Indonesia	15	Cambodia
8	Japan	16	Laos