# ENGLISH PROFICIENCY AND PROSPERITY: COMPARING THE OUTER CIRCLE AND THE EXPANDING CIRCLE

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## **Abstract**

English has become an international language, with a large number of governments promoting its study for national prosperity and economic development. However, there have been only a few empirical studies concerning the impact of English proficiency on the economic development of nations. These studies utilized some economic development indicators such as GDP, GDP per capita, as well as GDI. They also adopted various English proficiency indicators: average TOEFL scores, average EF Standard English Test scores, and a comparison of the Outer Circle and the Expanding Circle. They focused on the influence of English proficiency on economic development and foreign trade, but not on prosperity. Results in this field significantly change depending on the types of indicators; therefore, further research is necessary with various indicators to draw a more complete picture. This study adopted the Legatum Prosperity Index as a prosperity measurement and compared the Expanding Circle and the Outer Circle with a t-test. The result showed that the former was superior to the later. The study further investigated the situation in Asia and Africa, since these regions have a significant number of Outer-Circle countries. The research outcome indicated that there was no significant statistical difference between two circles in these regions. These results suggest that having a large number of those who have high English proficiency does not always lead nations to prosperity. Furthermore, they imply that both educational policy makers and practitioners need to be aware that there are factors other than English which could lead a nation to prosperity. Future research could also be warranted: It is interesting to analyze the difference between the two circles by paying attention to each category of the Legatum Prosperity Index. Another avenue is to conduct the same research with newer data.

Keywords: Prosperity, English Proficiency, Outer Circle, Expanding Circle

#### Introduction

Many governments are now promoting the teaching and studying of English as an international language, with the aim of promoting national prosperity and economic development (Seargeant & Erling, 2013). Previous research (Arcandi & Grin, 2013; Azam, Chin, & Prakash, 2010; Erling, Seargeant, Solly, Chowdhury, & Rahman, 2015; McCormick, 2013; Ozaki, 2018) has investigated the relationship between English proficiency and economic development, and various results have emerged. Overall, as Ferguson (2013) notes, the relationship between English and economic development is "contested and controversial" (p. 21). It is crucial to tackle this issue from various angles and find the effect of English proficiency on economic development and prosperity. If the language alone does not positively affect the development and prosperity status of nations, other factors need to be identified.

While some studies have been found on the relationship between English proficiency and economic development, there has not been much research on the relationship between English

proficiency and prosperity. Therefore, this study focuses on this issue by adopting the Legatum Prosperity Index as a prosperity measurement and comparing the Outer Circle and Expanding Circle.

The following section reviews related literature, which explains the background of this study in detail and leads to specific research questions and methods.

#### Literature Review

This section serves three purposes: Firstly, it reviews previous research on the relationship between English proficiency and economic development. The reason is that economic development is one of the elements of the Legatum Prosperity Index and there is little existing research concerning the relation between English proficiency and the prosperity of nations other than this criterion. Secondly, it explains the Outer-Circle and Expanding Circle. Finally, it attempts to define prosperity and explains the Legatum Prosperity Index.

# Previous Research on English and Economic Development

This section reviews previous studies in the field in order to lead this study to the exact research questions and methods.

Ku and Zussman (2010) found a correlational relationship between average TOEFL scores and the promotion of foreign trade in over 100 countries with a majority population of non-native English speakers. This result is understandable as English is the primary language used for international trade. However, trade alone can only partially contribute to the economic development of an entire country. Therefore, this study does not reveal whether English proficiency results in economic development in a given country.

Lee (n.d.) investigated the relationship between average TOEFL scores and three economic growth indicators in 43 countries: "average growth rate of real GDP per worker," "average investment rate in physical capital (investment share of GDP)," and "real GDP per worker" (p.6). He concluded that English proficiency had an effect on the economic growth of Asian and European countries but not on the growth of Latin American and African countries. This may be explained by the fact that Asian and European countries, unlike Latin American and African countries, had "sufficient accumulation of physical capital, technology and social capital," which is crucial to economic development in addition to English (Lee, n.d., p.20). The result of his study suggests that research in this field should specifically focus on different regions as well as the whole world.

Arcandi and Grin (2013) investigated the correlation between average TOEFL scores and GDP per capita in postcolonial Sub-Saharan Africa and Asia. They found that English did not have an impact on economic development, although wide-spread local languages did. Thus, they concluded that "English isn't special in terms of economic development or growth" (p. 22). However, it is not reasonable to use average TOEFL scores as an indication of English proficiency, since these scores do not accurately represent the average English proficiency of a country's population due to the very small number of test-takers (Ozaki, 2018).

In another study, EF, a global language training company, utilized the English Proficiency Index (EPI), which was developed based on their own English proficiency test called the EF Standard English Test (EF SET®). They found a correlation between English proficiency and economic development as indicated by the EPI and GNI as well as GDP (McCormick, 2013). The drawback of this study is the imprecision of these English proficiency and economic

development indicators: The number of test-takers was so small that the average test score did not accurately represent the average English proficiency of people in the study countries. Furthermore, GNI and GDP are significantly influenced by population size; therefore, they do not accurately indicate the economic development of nations (Ozaki, 2018).

Ozaki (2018) criticized the use of the average English proficiency test score as an English proficiency indicator. There is no English proficiency test for which the average score can accurately represent the entire population's average English proficiency in a country. This is mainly due to the extremely small number of test applicants compared to the total population. Based on this criticism, Ozaki (2018) used a comparison between the Outer Circle and Expanding Circle as an English proficiency indicator. In addition, he adopted two different types of GDP per capita and poverty lines as economic development indicators; he found that the Expanding Circle was economically more developed than the Outer Circle. According to Kachru (1985), the spread of English can be explained with three concentric circles: the Inner Circle, the Outer Circle, and the Expanding Circle. The Inner Circle includes countries where the majority of people use English as their mother tongue or first language (White, 1997). The Outer Circle consists of countries where English is an important second language in a multilingual setting (Rajadurai, 2005). Since citizens of these countries have many opportunities to use English in their everyday lives, as an official language, an second language, and/or a medium of instruction, they generally have high English proficiency. In contrast, in the Expanding Circle, people study English only as a foreign language (White, 1997), which means that they usually learn the language only at school and do not use the language in their daily lives. Therefore, their average English proficiency is typically not as high as Outer Circle population's.

This approach is more valid than the adoption of the average score of an English proficiency test. The reason is that the comparison of the two circles more accurately represents the entire population's average English proficiency, even though it is not a perfect measurement. As Ozaki (2018) explains: English proficiency differs from person to person and country to country in both circles (Ozaki, 2018). For instance, some Expanding-Circle countries may have many people with very high English proficiency.

In conclusion, previous studies in this field have indicated different results depending on the types of both economic-development and English proficiency indicators, as well as the countries or areas of the world they investigated. Another significant finding through the literature review is that only the relationship between English proficiency and economic development has been investigated. Nevertheless, the relationship between English proficiency and prosperity has not been researched yet.

## **Definition of Prosperity**

Dictionary definitions of prosperity are "the state of being successful, especially in making money" (Oxford Advanced Learners' English Dictionary 8<sup>th</sup> edition, electronic version, n.d., no page number), "when people have money and everything that is needed for a good life" (Longman Dictionary of Contemporary English 5<sup>th</sup> edition, electronic version, n.d., no page number), and "a condition in which a person or community is doing well financially" (Collins Advanced Dictionary of English, electronic version, n.d., no page number). In conclusion, when people or countries have sufficient money to lead a good life, they are prosperous, and in this sense, prosperity seems synonymous with economic development. Nevertheless, the question remains: What is a good life? Thus, the definition of prosperity is still ambiguous. That being the

case, this study uses the Legatum Prosperity Index as a prosperity measurement, since it was established through rigorous methodology. The next section briefly explains the index.

## **The Legatum Prosperity Index**

The Legatum Institute created the Legatum Prosperity Index (Legatum Institute, 2017a), which is "a framework that assesses countries on the promotion of their citizens' flourishing, reflecting both wealth and wellbeing across nine pillars of prosperity" (Legatum Institute, 2017b, p. 1). In other words, this index covers both money and good life aspects, the latter of which was the problem concerning the dictionary definitions. It covers 149 countries and includes nine pillars, each of which comprises various variables: "economic quality," "business environment," "governance," "personal freedom," "social capital," "society and security," "education," "health," and "natural environment" (Legatum Institute, 2017, p. 8). Each country is scored in each of the nine criteria, with a highest possible score of 100. Furthermore, the countries were ranked based on the mean of the total scores allotted to the nine areas.

## **Present Study**

This section explains the details of the current study, such as research questions and methods that were determined based on the literature review.

# **Research Questions**

Based on the literature review, the following two research questions were formed:

- 1. Which countries are more prosperous around the globe, Expanding-Circle countries or Outer-Circle countries?
- 2. Which countries are more prosperous in Asia-Pacific and Sub-Saharan Africa, Expanding-Circle countries or Outer-Circle countries?

The second question focuses on only Asia-Pacific and Sub-Saharan Africa, since these regions have a significant number of Outer-Circle countries, unlike the other regions such as Europe, North America, Central America, South America, the Middle East, and North Africa.

## **Research Methods**

In order to answer the research questions, I adopted Ozaki's (2018) research methods and compared the mean prosperity scores of the Expanding-Circle and Outer-Circle countries. The procedures to create the lists of Expanding-Circle and Outer-Circle countries are as follows: First, I deleted the six English-speaking countries, which were suggested by Crystal (2003), from the list of countries on the 2017 Legatum Proficiency Index (Legatum institute, 2017a). It should be noted that the 2018 edition was not yet available at the time of conducting this research; therefore, the research utilized the 2017 edition, which is no longer accessible on the Legatum Institute website, as the data were replaced with the 2018 edition. After the completion of this article, the 2018 edition appeared on their website. I then divided the remaining countries into Outer-Circle and Expanding-Circle countries using the lists of Outer-Circle countries created by Crystal (2003) and Ozaki (2018). When these procedures were completed, I compared these two types of countries in terms of the Legatum Prosperity Index scores with an independent samples t-test. I also compared the two circles in Asia-Pacific and Sub-Saharan Africa by using the same

method. In addition, the effect size *eta squared* was calculated to examine the magnitude of the difference when the difference was statistically significant, as suggested by a number of scholars (Brown, 2016; Field, 2005; Ishii, 2005; Pallant, 2005; Turner, 2014). Pallant (2005) states that eta squared is the most commonly used effect size among various types. The interpretation of effect sizes is as follows: ".01 = small effect, .06 = moderate effect, .14 = large effect" (Pallant, 2005, p. 209).

#### Results

This section presents the results of independent samples t-tests in terms of the whole world, Asia-Pacific, and Sub-Saharan Africa. Statistical results are shown in the way suggested by Pallant (2005). More detailed answers to the two research questions are presented and discussed in the next section.

## Whole World

An independent samples t-test was conducted to compare the prosperity scores of Expanding-Circle countries and Outer-Circle countries. The mean score of the former was higher than that of the latter, and there was a significant difference in scores for the former (M = 58.99, SD = 9.60) and the latter (M = 52.02, SD = 5.26); t(71.66) = 5.01, p = .01 < .05. In addition, the magnitude of the difference in the means was large (eta squared = .163). This means that the former countries were much more prosperous than the latter.

#### Asia-Pacific

An independent samples t-test was conducted to compare the prosperity scores for Expanding-Circle countries and Outer-Circle countries. There was no significant difference in scores for the former (M = 55.18, SD = 5.20) and the latter (M = 59.51, SD = 8.73); t(11.69) = -1.50, p = .08 > .05. This means that the former and latter countries were not different in terms of prosperity.

## Sub-Saharan Africa

An independent samples t-test was conducted to compare the prosperity scores for Expanding-Circle countries and Outer-Circle countries. There was no significant difference in scores for the former (M = 46.15, SD = 4.72) and the latter (M = 52.42, SD = 6.35); t(34.45) = -3.44, p = .40 > .05. This means that the former and latter countries were not different in terms of prosperity.

#### Discussion

This section commences by answering the research questions of this study in detail. It then discusses the answers, implications as well as limitations of this research, and recommendations for future research.

## **Discussion on the Answers to the Research Questions**

The two research questions of this study are as follows:

1. Which countries are more prosperous around the globe, Expanding-Circle countries or Outer-Circle countries?

2. Which countries are more prosperous in Asia-Pacific and Sub-Saharan Africa, Expanding-Circle countries or Outer-Circle countries?

In response to question one, Expanding-Circle countries were found to be far more prosperous than Outer-Circle countries. Although Outer-Circle countries are generally considered to have a larger number of people with a good command of English, their average prosperity score was much lower than their Expanding-Circle counterparts'. This result suggests that English does not always lead a nation to prosperity and corroborates Ozaki's (2018) study on the relationship between English proficiency and economic development. In contrast, it contradicts the results of Lee's (n.d.) and McCormick's (2013) studies, possibly because different English proficiency and prosperity indicators were adopted. Research results in this field may differ significantly depending on the research methods used, particularly the types of economic development and English proficiency indexes employed (Ozaki, 2018).

In response to question two, the mean prosperity scores of the Expanding-Circle and Outer-Circle countries did not differ in Asia-Pacific and Sub-Saharan Africa, perhaps because most of the countries in these regions were not very prosperous, while the situation is much more diverse worldwide. This result also suggests that English does not always lead a country to prosperity. However, the mean proficiency score of the Outer Circle was higher than that of the Expanding Circle in both Asia-Pacific and Sub-Saharan Africa, even though the difference in mean scores was not statistically significant. In the future, the gap might become wider and statistically significant if Outer-Circle countries become more prosperous due to the large number of people with high English proficiency.

## **Implications**

The results of this study imply that there exist "factors other than English proficiency, for example, stable politics, quality education, advanced technology, diligent and highly skilled workers, or natural resources, which may be more important than the English language" (Ozaki, 2018, p. 52). Physical and social capital is also important (Lee, n.d.). Ozaki (2018) notes that language is merely a set of symbols (Klopf, 2001) and sounds, which are not very useful without any specific knowledge, non-language skills, and/or well-developed cognitive abilities.

Furthermore, negative effects of educating children in English, which is not their L1, have been reported, although such education significantly improves the whole population's English proficiency. Minority language students who received education in their first language achieved higher academic goals than those who were educated in a second or third language (Ramirez, Yuen, & Ramey, 1991; Thomas & Collier, 1997; Walter & Dekker, 2011). Moreover, a study conducted in Pakistan found that adopting English as the medium of instruction led to a high illiteracy rate due to a lack of qualified teachers and resources, particularly in rural areas (Melitz, 2008). National illiteracy rates generally correlate with low economic and social development (Ricento, 2015). Finally, in Zambia, using English as the educational language was found to negatively influence primary students' reading and arithmetic skills (Rassool, 2013).

Both English education policy-makers and practitioners need to consider these findings and improve English language education to ensure that it contributes to national prosperity.

#### **Limitations and Recommendations for Future Research**

This research has two limitations: Firstly, it did not compare the two concentric circles regarding each of the nine pillars of the Legatum Prosperity Index. If this had been done, more details concerning the relationship between English proficiency and prosperity would be revealed. Therefore, such research is the next step in this research field. Secondly, the Index is renewed annually, and further research with newer data may lead to different results.

## Conclusion

This study investigated the relationship between English proficiency and the prosperity of countries by comparing Expanding-Circle and Outer-Circle countries on the basis of the Legatum Proficiency Index. The results demonstrated that Expanding-Circle countries were globally more prosperous than Outer-Circle countries, although there was no difference between them in Asia-Pacific and Sub-Saharan Africa.

The results of this research and the previous studies in related fields suggest that English alone does not bring prosperity to a nation. Therefore, the non-language factors mentioned in this article should be incorporated into the teaching of English as an international language in order to relate the language to national prosperity.

Finally, a comparison of the two circles from the viewpoint of each of the nine pillars of the Legatum Prosperity Index would reveal more details of the relationship between English proficiency and prosperity. It would also be interesting to conduct the same study by using a newer edition of the Legatum Prosperity Index, since such research might show a different tendency.

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# **Appendices**

**Appendix A: World Prosperity Index** 

Appe	Expanding Circle	Outer Circle			
Rankings	Countries	Scores			
1	Norway	79.85	Singapore	Scores 73.53	
2	Finland	78.46	Malta	70.66	
3	Switzerland	77.64	Hong Kong	69.83	
4	Sweden	77.59	Mauritius	65.90	
5	Netherlands	77.33	Malaysia	63.69	
6	Denmark	77.06	Trinidad and Tobago	62.44	
7	Germany	76.41	South Africa	61.11	
8	Iceland	76.06	Sri Lanka	61.00	
9	Luxembourg	75.71	Jamaica	60.46	
10	Austria	75.71	Dominican Republic	60.23	
11	Belgium	74.24	Botswana	59.55	
12	France	72.01	Philippines	59.33	
13	Spain	71.42	Namibia	58.64	
14	Slovenia	71.42	Guyana	57.91	
15	Japan	70.40	Belize	57.44	
16	Portugal	69.55	Ghana	56.61	
17	Czech Republic	69.24	Rwanda	56.50	
18	Estonia	69.16	Nepal	56.18	
19	Uruguay	67.40	Kenya	54.50	
20	Costa Rica	66.69	India	54.38	
21	Italy	66.20	Zambia	53.91	
22	Cyprus	66.17	Tanzania	53.59	
23	Poland	66.08	Malawi	52.68	
24	Chile	66.04	Bangladesh	52.17	
25	Slovakia	65.50	Lesotho	51.71	
26	South Korea	65.36	Uganda	50.93	
27	Latvia	65.35	Zimbabwe	50.37	
28	Israel	65.32	Sierra Leone	49.08	
29	United Arab Emirates	64.36	Nigeria	48.20	
30	Panama	64.19	Cameroon	48.20	
31	Lithuania	63.69	Swaziland	48.13	
32	Croatia	63.48	Liberia	48.10	
33	Hungary	62.30	Ethiopia	46.80	
34	Romania	62.05	Pakistan	45.52	
35	Qatar	62.00	Burundi	43.76	
36	Argentina	61.78	Sudan	38.39	
37	Greece	61.64			
38	Suriname	61.29			

	Expanding Circle		Outer Circle	
39	Bulgaria	61.20		
40	Brazil	60.64		
41	Macedonia	60.31		
42	Serbia	60.20		
43	Indonesia	60.18		
44	Peru	60.03		
45	Mexico	59.97		
46	Bahrain	59.61		
47	Montenegro	59.04		
48	Colombia	58.93		
49	Thailand	58.91		
50	Mongolia	58.65		
51	Paraguay	58.64		
52	Ecuador	58.33		
53	Kazakhstan	58.14		
54	Oman	58.06		
55	Albania	57.89		
56	Bolivia	57.62		
57	Vietnam	57.52		
58	Saudi Arabia	57.51		
59	Kuwait	57.41		
60	Honduras	57.29		
61	Kyrgyzstan	57.08		
62	Nicaragua	56.94		
63	Georgia	56.93		
64	Guatemala	56.65		
65	Turkey	56.28		
66	China	55.83		
67	El Salvador	55.47		
68	Jordan	55.28		
69	Cambodia	55.27		
70	Tunisia	55.21		
71	Belarus	55.09		
72	Armenia	54.83		
73	Morocco	54.65		
74	Moldova	54.61		
75	Russia	54.28		
76	Tajikistan	53.99		
77	Lebanon	53.57		
78	Azerbaijan	53.33		
79	Senegal	53.20		
80	Laos	53.09		

	Expanding Circle		Outer Circle	
81	Djibouti	52.33		
82	Ukraine	51.75		
83	Burkina Faso	51.75		
84	Algeria	50.82		
85	Iran	50.65		
86	Benin	50.37		
87	Egypt	49.99		
88	Ivory Coast	49.54		
89	Mozambique	49.48		
90	Gabon	49.16		
91	Madagascar	49.15		
92	Togo	48.50		
93	Comoros	48.41		
94	Venezuela	47.87		
95	Mali	47.17		
96	Congo	46.67		
97	Libya	45.54		
98	Guinea	45.06		
99	Niger	44.69		
100	Angola	42.21		
101	Iraq	40.60		
102	Democratic Republic of Congo	40.59		
103	Mauritania	40.58		
104	Chad	39.59		
105	Afghanistan	38.76		

**Appendix B: Asia-Pacific Prosperity Index** 

	Expanding Circle		Expanding Circle Out		r Circle
Rankings	Countries	Scores	Countries	Scores	
1	Japan	70.40	Singapore	73.53	
2	South Korea	65.36	Hong Kong	69.83	
3	Indonesia	60.18	Malaysia	63.69	
4	Thailand	58.91	Sri Lanka	61.00	
5	Mongolia	58.65	Philippines	59.33	
6	Kazakhstan	58.14	Nepal	56.18	
7	Vietnam	57.52	India	54.38	
8	Kyrgyzstan	57.08	Bangladesh	52.17	
9	Georgia	56.93	Pakistan	45.52	
10	China	55.83			
11	Cambodia	55.27			
12	Armenia	54.83			
13	Tajikistan	53.99			

	Expanding Circle		Outer Circle	
14	Azerbaijan	53.33		
15	Laos	53.09		
16	Afghanistan	38.76		

Appendix C: Sub-Saharan Africa Prosperity Index

	Expanding Circle		Outer Circle	
Rankings	Countries	Scores	Countries	Scores
1	Senegal	53.20	Mauritius	65.90
2	Burkina Faso	51.75	South Africa	61.11
3	Benin	50.37	Botswana	59.55
4	Ivory Coast	49.54	Namibia	58.64
5	Mozambique	49.48	Ghana	56.61
6	Gabon	49.16	Rwanda	56.50
7	Madagascar	49.15	Kenya	54.50
8	Togo	48.50	Zambia	53.91
9	Mali	47.17	Tanzania	53.59
10	Congo	46.67	Malawi	52.68
11	Guinea	45.06	Lesotho	51.71
12	Niger	44.69	Uganda	50.93
13	Angola	42.21	Zimbabwe	50.37
14	Democratic Republic of Congo	40.59	Sierra Leone	49.08
15	Mauritania	40.58	Nigeria	48.20
16	Chad	39.59	Swaziland	48.13
17	Central African Republic	36.87	Liberia	48.10
			Ethiopia	46.80
			Burundi	43.76
			Sudan	38.39