Candidates must complete this page and then give this cover and their final version of the extended essay to their supervisor.

<table>
<thead>
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Diploma Programme subject in which this extended essay is registered: **Economics**

(For an extended essay in the area of languages, state the language and whether it is group 1 or group 2.)

Title of the extended essay: **To what extent did the recent economic climate in Korea determine whether Korean parents to send their children to study abroad or not.**

Candidate’s declaration

*If this declaration is not signed by the candidate the extended essay will not be assessed.*

The extended essay I am submitting is my own work (apart from guidance allowed by the International Baccalaureate).

I have acknowledged each use of the words, graphics or ideas of another person, whether written, oral or visual.

I am aware that the word limit for all extended essays is 4000 words and that examiners are not required to read beyond this limit.

This is the final version of my extended essay.

Candidate’s signature: ___________________________ Date: 2.10.2011
Supervisor’s report

The supervisor must complete the report below and then give the final version of the extended essay, with this cover attached, to the Diploma Programme coordinator. The supervisor must sign this report; otherwise the extended essay will not be assessed and may be returned to the school.

Name of supervisor (CAPITAL letters)

Comments

Please comment, as appropriate, on the candidate’s performance, the context in which the candidate undertook the research for the extended essay, any difficulties encountered and how these were overcome (see page 13 of the extended essay guide). The concluding interview (viva voce) may provide useful information. These comments can help the examiner award a level for criterion K (holistic judgment). Do not comment on any adverse personal circumstances that may have affected the candidate. If the amount of time spent with the candidate was zero, you must explain this, in particular how it was then possible to authenticate the essay as the candidate’s own work. You may attach an additional sheet if there is insufficient space here.

has worked on her EE with enthusiasm and dedication. We met on a regular basis and she implemented the necessary changes, and realized what changes were required often by looking at the criteria first. She was very proactive in the whole process. She has excellent time management skills, yet struggled to integrate economic theory and found it hard to make the links between economic concepts at the start, but gained this skill as her essay developed. She thoroughly enjoyed interviewing the respondents and was surprised by the result of her primary research (i.e. disprove her hypothesis). Other skills that she gained are the analysis of data, formal writing and applying economic theory in the real world. Ki Won was an absolute pleasure to work with.

I have read the final version of the extended essay that will be submitted to the examiner.

To the best of my knowledge, the extended essay is the authentic work of the candidate.

I spent [5] hours with the candidate discussing the progress of the extended essay.

Supervisor’s signature: ____________________________ Date: 10Nov2011
### Assessment form (for examiner use only)

**Candidate session number**

<table>
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<td>G use of subject language</td>
<td>3</td>
<td>4</td>
<td>Needs some definitions, more theory/graphics</td>
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<td>3</td>
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**Total out of 36**: 28

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Name of first examiner: ____________________________  
Examiner number: _________

Name of second examiner: ____________________________  
Examiner number: _________
## Assessment form (for examiner use only)

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<tr>
<td>K holistic judgment</td>
<td>3</td>
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</tbody>
</table>

**Total out of 36** 28

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Candidate session number: [__]
Subject: Economics

Topic: "To what extent did the recent economic climate in Korea determine whether Korean parents to send their children to study abroad or not."

Session: May 2012
Name: 
Candidate number: 
Supervisor: 
Word Count: 3840 words.
Abstract

In this extended essay, the research question, "To what extent did the recent economic climate in Korea determine whether Korean parents send their children to study abroad or not." is investigated. From comparisons of data of the Korean economic climate and number of Korean students who leave Korea for their education generate close relationship between two factors.

From primary and secondary resources which include unemployment rate, inflation rate and disposable income of Koreans and global and number of Korean students studying abroad were used for the essay. The primary research is conducted by a survey in Korea of 50 adults who have children, in June 2011. From this, there is a close relationship between number of Korean student studying abroad and economic climate in Korea. From the primary research, Korean parents spend money on their children's education 'above' their real financial ability. And they take that risk since the opportunity cost of giving up children's education is much bigger than risk that they take when they pay for it.

From the survey and economic theory from secondary resources, it was possible to reach the conclusion – income elasticity of demand for education abroad is less than 1. This means education abroad classified as luxury goods is not true anymore. Even though it is a luxury good since people have to afford extra money to consume the educational services abroad, people don't stop spending money(withdraw their children) if there is a decrease in their discretionary income.

In conclusion, the that bad Korean economic climate does not mean less number of Korean students studying abroad even though they can affect the choice of countries or academic goals that they plan.

(Word count:277)
## Contents

1. Abstract ................................................................. 2

2. Introduction............................................................. 4

3. Methodology.............................................................. 7

4. Result and Analysis.................................................... 9

5. Conclusion............................................................... 24

6. Appendix................................................................. 26

7. Bibliography............................................................ 35
Introduction

As the world seems to require more talented people who are international, open-minded and capable, more people want to study abroad, accumulate broad experiences and knowledge. Also education is now significantly more commercial in many countries in comparison to 2 decades ago, and so in Korea. In Korea, people send their children to other countries and wish that their children are able to experience other school systems, be in a better educational environment and learn English which seems to be essential to be a global citizen. But the big problem is that even though they may not be able to afford it, they force themselves to give their children opportunities to study in foreign countries. Likewise, in many cases financial factors affect students and parents who are doing or considering education abroad. Since the economy of a country impacts on incomes and jobs, in a bad economic climate such as the 2009 global recession people might struggle to afford to send their children to foreign countries. An even more 'bad economic climate' would impact negatively on international student numbers, which means there will be a decline in the number of international students who study abroad. Therefore the research question is

“To what extent did the recent economic climate in Korea determine whether Korean parents send their children to study abroad or not.”

By investigating this topic the significant relationship of an economic situation and demand of international education of Koreans will be revealed. As Korea has the second highest population which leaves the country to use international education services, investigating the population’s destination will be worth for countries which earn their incomes from education services especially English speaking countries such as New Zealand. If the group of Koreans (leaving Korea for their education) moves back to Korea and stop demanding in the international education market because of the economic factors, it will significantly impact on many countries which offer international education services. Also by studying this relationship (economic climate and demand of international education of Koreans), it will help to countries to investigate which factors attract Korean parents to choose where to study which also means where to spend.
Table 1 shows the economic climate changes over the years (2002-2009) in terms of Gross Domestic Production (GDP) in % and there seems to be a very close relationship between the world economic climate and the Korean economic climate. For example, in a bad global economic climate (e.g. in 2009, only 3.1% of economic growth is slower than the 5.2% of growth in 2008) countries will likely reduce their imports. Korea, which relies much on exports for its income, would have been disadvantaged. As it produces manufactured goods for which Price Elasticity Demand (PED) is elastic- ¹a change in price causes a greater than proportionate change in the quantity demanded², Korean economic climate will declined as well (e.g. in 2009, only 0.2% economic growth which is much slower than the 2.3% growth in 2008). As net exports is a positive component of national income (RGDP=C+I+G+(X-M) the decrease in exports revenue will affect the Korean national income in the ways of ‘slowing’ real GDP which can represent slower economic growth. Therefore there is an assumption that slower economic growth of Korea results in lower income of Korean people.

²Table 1: annual economic growth (GDP change) of South Korea compared to the world (%).

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>7.2</td>
<td>2.8</td>
<td>4.6</td>
<td>4.0</td>
<td>5.2</td>
<td>5.1</td>
<td>2.3</td>
<td>0.2</td>
</tr>
<tr>
<td>World</td>
<td>2.2</td>
<td>2.7</td>
<td>3.8</td>
<td>4.9</td>
<td>4.7</td>
<td>5.3</td>
<td>5.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Table 2 shows the relationship between economic growth of Korea and the number of students who leave Korea to study abroad. For example, even though there was a constant increase in the number of students leaving (from 2004 to 2008), the economic growth rate decreased quite rapidly (from 2.3% in 2008 to 0.2% in 2009), the number of Korean students who go abroad decreased by approximately 30.1%.


Table 2: the number of Korean students who go abroad for the reason of education.

<table>
<thead>
<tr>
<th>years</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td>10,132</td>
<td>10,498</td>
<td>16,446</td>
<td>20,400</td>
<td>29,511</td>
<td>27,668</td>
<td>27,349</td>
<td>18,118</td>
</tr>
</tbody>
</table>

The theory of income elasticity of demand (YED) allows test the hypothesis that says 'worse economic climate leads to less number of Korean students studying abroad' which can also be expressed as a relationship between the Korean economic growth and the quantity demanded of Koreans’ education in foreign countries. YED in this case, is as the measure of how much the demand for foreign education changes when there is a change in the Korean people’s income.

\[
\text{YED} = \frac{\% \text{ change in quantity demanded of international education}}{\% \text{ change in income of Korean peoples}}
\]

Since international education is luxury good, the value of YED will be positive which means when income increases, the quantity demanded increases as well as. So people will spend money on education after they have satisfied their needs and wants. Vice versa, when people earn less income than before, they will reduce the money that they spend on international education. This is discretionary income is defined as 4 income that has been left over after people charged for their necessities so does the actual money that people can afford for their extra spending. Thus it is hypothesized that the YED of international education is elastic which means the percentage change in quantity demanded of international education is bigger than the percentage change in Korean people’s income—the YED value which is greater than 1.

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Methodology

In order to answer the research question, primary and secondary resources are used. The survey which is primary resource has been done in Korea in June 2011 and all of the respondents were Korean. Also for this investigating, the survey has been done under an assumption which states 'as economy changes, the income of respondents’ changes as well'.

To achieve a reliable result from the survey, the respondents were divided into two groups- 25 people who I know and 25 people who I do not know. Some of them might be led to the answers that are expected from the survey result.

The primary research conducted consisted of two surveys. Firstly, respondents were selected on the basis of having children. Within this group of respondents, there was one group that has children who study abroad, and one group that does not have children studying abroad. Group one was asked whether they have ever reconsidered their children studying abroad or not, as well as the reason and when they did. The answers might indicate that they have reconsidered spending money on children’s education in other countries because of the global recession as it might prove that there is a close relationship between number of Korean students who study abroad, and the Korean economic climate. For the second group (which does not have children studying abroad) they are asked whether they are willing to send their children abroad for education if they do not struggle financially. This gave an idea that they are not sending children abroad because of financial reasons.

Questions related to how much people save, whether they are employed or not, how they think about the current inflation rate were asked to all respondents to see more detailed information about Koreans’ possible income and spending powers and how this may be influenced by inflation.

To identify how financial factors play a role for Korean parents’ spending on their children’s education abroad, a question asking what factors did/would influence when you decide the country that your children are going to be studying in is included in the survey.
For my secondary research the information and statistics from internet has been used -  
5World Factbook, 6OECD, 7World Bank Group and 8Korean Government statistics. From 
those resources it was possible to find economic data such as the real GDP of Korea and 
the world. Also to identify the actual effects of economic climate on number of Korean 
students leaving Korea to study, each year's number of Korean students studying abroad 
was researched so it could be compared with the economic climate shown by the real 
GDP.

5 www.cia.gov
6 www.stats.oecd
7 data.worldbank.org
8 kostat.go.kr
Results and analysis

Graph 1: Excess incomes after the respondents have paid for necessities. (All respondents)

From graph 1, it is noticeable that 42% of respondent have a discretionary income over 15% of their real income. And 40% of respondent can afford less than 10% of their income for education (discretionary income). From this, it is possible to compare higher discretionary income earners (42% of respondents) and lower discretionary income earners (40% of respondents) ability to send their children abroad which because it will require their economic capacity.

It indicates that everyone has some discretionary income.
From the comparison of graphs 2a and 2b, it becomes clear that financial ability affects parents who send their children abroad. In the first group (graph 2a), 49% of people were the lower discretionary income earners who has been classified and defined as people who has less than 10% of their income as their excess incomes. And 64% of people from the second group (graph 2b) were the higher discretionary income earners (more than 15% of their income as their discretionary income). Overall, people who send children abroad for international education are relatively economically comfortably. This shows that how the economic climate of Korea as well as the world climate will significantly impact on the number of Koreans students who study abroad and the international education market.
Table 1: Unemployment rate (all respondents)

<table>
<thead>
<tr>
<th>'yes'</th>
<th>'no'</th>
<th>'not willing to inform'</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>44</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1 shows the overall proportion of unemployment of the respondents. Respondents answered 'yes' if they have been unemployed for the last 3 years and 'no' if they have not been unemployed for 3 years. 12% of the respondents have been unemployed and all of the people who experienced unemployment are from the second group who Koreans do not have any children studying abroad. This supports that if parents have been unemployed or part time employed, it is less likely to send kids abroad. And thus their personal economic situation rather than the economic climate determines parents decision to send their children abroad to study.

Moreover this overall unemployment rate from the survey data can be compared with the world overall unemployment rate that is from secondary resource, 8.8% (2010 est) which is lower than the unemployment rate from the survey. This tells higher unemployed rate of Korea compared to the global rate. And the Korean economy climate in 2010 and the last 3 years might have been worse than the world average. This represents proportionally Korean economy has fallen behind than the global economy.

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9 World Factbook (www.cia.gov)
Graph 3a: job groups that the respondents have (Group that answered Q4- 'no' for children studying abroad)

- 24% part time
- 15% full time
- 9% self employed
- 52% not willing to inform

Graph 3b: job groups that the respondents have (Group that answered Q5- 'yes' for children studying abroad)

- 47% part time
- 53% full time
- 0% self employed
- 0% not willing to inform

As it is recognizable by comparing the graph 3a and 3b, there is a larger proportion of lower income earning jobs for the group who has not sent any children abroad. Also the group who has children abroad consists of most half of full time employed and self employed people (graph 3b). From this we would conclude that, it seems that people in this group have more stable and better payment, so they are more able to afford money for their children's education in other countries.

This is related to graph 1. People shown graph 3b would be more likely to be in the 42% group which earns higher income than the 40% of respondents who have less than 10% discretionary income. Even though it cannot mirror everything related with economic climate of Korea it can be related with table 1 that represents the difference of two groups of respondent of the survey.

From this, we can say that Koreans with higher discretionary income would be more able to pay for their children's education abroad as it is more like a luxury good. Thus the number of Korean students studying abroad is more relative with economic abilities of individuals (Korean parents) than the economic climate of Korea.
All respondents indicated that they thought that there was inflation from 2010 to 2011. This reduces their real income unless their wage increased as well. Inflation is a sustained rise in the general price level over a period of time. And if Koreans earn the same income, but they have to pay more for goods and services, their real income decreases. This leads us to assume that due to inflation in Korea, the discretionary income Koreans will be reduced too. This possibly negatively affects the number of students being sent abroad. However it does not clearly indicate that the inflation in Korea is caused by its economic growth or other types of inflation. If it was due to Korean economic growth, it will represent a good economic climate in Korea. If it is not, it will mirror and prove that there is a bad performance of economy in Korea (bad economic climate).

Table 2: decision of the respondents' for their children's education abroad without any financial problem (Group that answered Q4- no for children studying abroad)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>10</td>
</tr>
</tbody>
</table>

From table above (table 2), more than 60% of second group of respondents (people do not have any children studying abroad) would be having financial problem if they were to send their children abroad for education in other countries. The people who answered 'no' for this question might consider other factors such as their children's safety, academic goals or cultural problems rather than economic factors. As the majority of the respondents (over 60%) answered 'yes' for this, finance is the major factor that affects the number of Korean students studying abroad. It proves that the importance of financial ability of people to send their children abroad which is a luxury good.

Graph 4a: factors that the respondents would consider to decide the country where their children are going to be studying (Group that answered Q4- 'no' for children studying abroad)

- a - Country that has less racial discrimination.
- b - Country that has good natural environment and variable recreation programs.
- c - Country that good weather conditions.
- d - Country that has cheaper fees compared to its environment.
- e - Country that has higher standard and environment to compete with students who are capable.
Graph 4b: factors that the respondents have considered to decide the country where their children are going to be studying (Group that answered Q5- ‘yes’ for children studying abroad)

<table>
<thead>
<tr>
<th></th>
<th>a - The country has good education environment.</th>
<th>b - The country offers better opportunity to get into well-known universities.</th>
<th>c - The country has cheaper education fees among the countries that have similar conditions.</th>
<th>d - The country has less discrimination than the other countries.</th>
<th>e - The country offers more recreation programs than the other countries.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>1</td>
<td></td>
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</tbody>
</table>

Both graphs 4a and 4b show factors that affect Korean parents' decision to send their children abroad. 'Cheaper education fees' was the second most considerable factor in both groups, one that would consider when they are sending their children (graph 4a) and another that had been considering (graph 4b).

Almost half (47%) of the respondents from the group which has children abroad studying indicated that they have been or are reconsidering their spending on children's international education. This suggests that the relatively bad economic climate in Korea which has been investigated previously seems to be true. Also this shows that Korean parents actually 'feel' the bad economic climate as much as they recognize they have to stop spending on their children's education.
Graph 5: reasons that Korean parents have reconsidered their children's education abroad (Group that answered Q5- 'yes' for children studying abroad)

<table>
<thead>
<tr>
<th>number of respondents</th>
<th>a-Financial reasons</th>
<th>b-Children’s (child’s) maladjustment to the foreign environment</th>
<th>c-A sense of distance between family members</th>
<th>d-others</th>
<th>all of them</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
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<td></td>
<td>0</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 3: time period that they have reconsidered (Group that answered Q5- 'yes' for children studying abroad, out of 8 people)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

From graph 5 and 6 and table 3, it becomes clear how closely the Korean economic climate relates to the number of Korean students studying abroad. Almost half of the respondents (47%) have answered ‘yes’ to the reconsideration of sending their children abroad. Most of people who answered ‘yes’ for the question said it was because of financial reasons, including one parent who said ‘all of them’ (graph 8). Additionally, half of the Koreans who answered ‘yes’ said that they reconsidered in 2006 to 2009 and the other half of them picked from 2009 to 2011. This mirrors that even though they did not actually stop their spending on their children's education, it seems that a bad economic climate plays quite an important role in their decision for spending “extra” money for children's education in other countries.
Graph 6a: percentage that respondents are willing and able to spend on education per child.

- more than 20%
- 15-10%
- less than 5%

Graph 6b: percentage that respondents actually spending on education per child.

- more than 50%
- 50-40%
- 30-20%

By comparing graph 6a and 6b showing percentage of respondents' income for their actual spending on children's education and percentage of their income that they are willing and able to (Q5 respondents), it becomes obvious that most Korean parents sacrifice themselves for their children’s or child’s education. From the graph 6b, the majority (41%) of the respondents said they spend 30-20% of their income on their children’s education. Also second mostly 40-30% of their income are spent on education (35% of the respondents).

The results shown in graph 6b can be compared with the graph 1 as well. On the graph 1 only 18% of respondents said they have more than 20% of their income as discretionary income. However on graph 6a, it is noticeable that 82% of respondents spend more than 20% of their income per child on international education. This proves the statement from the comparison between graph 6a and 6b that most of parents (respondents) sacrifice and forces themselves to spend money on their children’s education regardless of their financial ability.

From the investigation it has been found that economic climate in Korea hardly plays a role on the decision of Korean parents whether they spend money on their children's international education. Unless they have significant financial problems and they have to sacrifice their necessities, Korean parents are willing to spend money on their children's
education abroad since they expect their children to be well educated. Korean parents invest money on their children's education for their future expectation such as children would have jobs that paid higher than others. Thus it seems Korean parents do not actually consider the economic climate in Korea which can affect their real income as well as discretionary income for their children's education abroad.

Table 4 shows the economic climate in Korea which has been measured by the macroeconomic components (Real GDP, inflation rate and unemployment rate). If there is a higher real GDP growth, it will represent better economic climate. However, a higher percentage of unemployment represents a worse economic climate since that less people work and they would not consume much because they do not earn enough money. This will lead to a reducing the economic potential of Korea in long run. Higher inflation might represent good economic climate in Korea because higher inflation can occur as people consume more (increase Aggregate Demand) as well as more production (Aggregate Supply). However higher inflation sometimes indicates a bad economy, depending on what types of inflation it is. In the table 4, it is noticeable that the recently Korea is performing at an acceptable level of economy which means people in Korea has business confidence as well as consumer confidence. Because Korea has got rid of the recessionary phase in 2009 (0.2% of RGDP growth, higher unemployment rate and lower inflationary rate compare to a year before) as the 6.1% of growth in Real GDP shows. Also there was a higher inflation (2.8% → 3.0%) rate and lower unemployment rate (3.7% → 3.3%).
Table 4: Annual Korean economic climate measured by \(^{11}\)Real GDP growth, \(^{12}\)inflation rate, and \(^{13}\)unemployment rate in percentage (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth</td>
<td>6.2%</td>
<td>3.1%</td>
<td>4.6%</td>
<td>4.0%</td>
<td>4.8%</td>
<td>5.0%</td>
<td>2.2%</td>
<td>0.2%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>2.8%</td>
<td>3.6%</td>
<td>3.6%</td>
<td>2.8%</td>
<td>2.2%</td>
<td>2.5%</td>
<td>4.8%</td>
<td>2.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>3.1%</td>
<td>3.4%</td>
<td>3.6%</td>
<td>3.7%</td>
<td>3.3%</td>
<td>3.3%</td>
<td>3.2%</td>
<td>3.7%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

\(^{14}\)Table 5: \(^{15}\)Annual average income of Korean people (PPP) in $US

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita</td>
<td>19400</td>
<td>17800</td>
<td>19200</td>
<td>22600</td>
<td>24500</td>
<td>25000</td>
<td>27600</td>
<td>28100</td>
<td>30000</td>
</tr>
</tbody>
</table>

To see the change in income of Korean, the change in the GDP per capita (average income) has been calculated into percentage.


\(^{15}\) Gross Domestic Production (GDP) per capita (PPP)
Example: change in GDP per capita in percentage, from 2009 to 2010

\[
\frac{\Delta \text{GDP per capita} (2010 - 2009)}{\text{older GDP per capita (2009)}} \times 100
\]

\[
\frac{30000 - 28100}{28100} \times 100 \\
\approx 6.8\%
\]

Table 6: Annual change in average income of Korean people (PPP) in %

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in GDP per capita</td>
<td>-8.2</td>
<td>7.9</td>
<td>17.7</td>
<td>8.4</td>
<td>2.0</td>
<td>10.4</td>
<td>1.8</td>
<td>6.8</td>
</tr>
</tbody>
</table>

By comparing table 4 and table 6, it is indicated that there is a relationship between Korean people's income and the economic climate in Korea. For example, from 2008 to 2009, there was a very low GDP growth and higher unemployment rate which indicates a bad economic climate. This led the lower percentage of income increasing (1.8%) compared to the other years such as from 2009 to 2010 (6.8%) which has been shown as the year that Korea had a good economic performance. Thus, if there is a good economic climate in Korea, the income of Korean people will increase.

Comparing table 7 (population in Korea) and the annual number of Korean students who leave Korea for international education will give a better idea of relationship between economic climate in Korea and number of Korean students studying abroad.

16 Table 7: Annual population in Korea (million)

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>population</td>
<td>48.04</td>
<td>48.14</td>
<td>48.30</td>
<td>48.46</td>
<td>48.61</td>
<td>48.75</td>
<td>48.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: the number of Korean students who go abroad for the reason of education

<table>
<thead>
<tr>
<th>years</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td>10,132</td>
<td>10,498</td>
<td>16,446</td>
<td>20,400</td>
<td>29,511</td>
<td>27,668</td>
<td>27,349</td>
<td>18,118</td>
</tr>
</tbody>
</table>

By calculating the percentage of the number of Korean students leaving Korea for international education out of the total population in Korea it will become clear that how the number of Korean students studying abroad changes as Korean economic climate changes.

For example: in 2009,

\[
\frac{\text{number of Korean students studying abroad}}{\text{total population of Korea}} \times 100
\]

\[
\frac{18,118}{48,870,000} \times 100 = 0.0371\%
\]

Table 9: Annual percentage of students studying abroad out of the total Korean population (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>population</td>
<td>-</td>
<td>-</td>
<td>0.0342</td>
<td>0.0424</td>
<td>0.0611</td>
<td>0.0571</td>
<td>0.0562</td>
<td>0.0371</td>
<td>-</td>
</tr>
</tbody>
</table>

With a consideration of Koreans' awareness about international education which would got better as Korean people recognize importance of English in a global society, there was no significant impact of economic climate on the percentage of Korean students studying abroad out of the total Korean population (according to data from 2004 to 2008). However in 2009, as it is shown in the table 9, there was a 'huge' decrease in the percentage of Korean students studying abroad and this can be explained by the economic climate (world economic crisis in 2009). This can be explained since in the world economic crisis in 2009, people (Korean people) underwent serious financial problems, for example they could not afford their necessities.

\[\text{unknown (unknown). historical data graphs per year. Available:}\]
Diagram 1: Income elasticity demand of luxury goods, international education and necessity goods.

YED value of necessity goods is relatively smaller (inelastic) since people always require necessity goods to sustain their lives. Thus a decrease in income level ($Y_1 \rightarrow Y_2$) will result the smallest change in quantity demanded ($OQ_1 \rightarrow OQ_2$).

However in case of international education and luxury goods, the YED value is bigger than of necessity goods. So at the same decrease in income level, the changes (decreasing) in quantity demanded are bigger than in case of necessity goods. However Korean parents will take opportunity cost for their children's future, the YED value of international education will be more inelastic than the luxury goods' which is bigger than 1. So does smaller quantity demanded change ($OQ_3 \rightarrow OQ_4 < OQ_5 \rightarrow OQ_6$).

Even though there is a decrease in people (Korean parents') income because of other economic reasons such as an inflation or bad economic climate, it would not impact on the quantity demanded of international education much. However once they are threatened by financial problem that they cannot afford their necessities they would not
be able to and not willing continue to spend money on their children's international education. Therefore, Koreans' personal income seems to play a larger role in sending their child abroad than the Korean economic climate.
Conclusion and Recommendations

Through the primary and secondary research, the research question, "To what extent did the recent economic climate in Korea determine whether Korean parents send their children to study abroad or not" has been answered. The economic climate in Korea hardly plays a role in the determination of Korean parents to send their children abroad for international education. Instead, to some extent their individual economic ability does.

From the survey, it was noticeable that one group, which has children abroad to study, is in a better financial situation than another group that does not have children abroad. Still the economic climate in Korea can affect the people's income and economic confidence, but regardless how bad or good the Korean economic climate is, Korean people's individual economic ability affected the number of Korean students studying abroad. A comparison of the recent Korean economic climate was investigated through the unemployment rate, the GDP per capita and the proportion of Korean student studying abroad, it became clear that there is no direct impact of the recent Korean economic climate on number of Korean students studying abroad.

Even though the economic climate in Korea was bad in 2008-2009, Korean parents would not change their decision to send their children abroad and give up their education. It is because parents are willing to accept opportunity cost for their children's education. Income elasticity of demand of international education is less elastic than the of other luxury goods.

However, as there was a significant change in the proportion (number) of Korean student studying abroad during the world economic crisis in 2009, parents might give up their children's education abroad if they are threatened by their own financial problems.

Therefore, it became clear that income of Korean affects the quantity demanded of international education of Koreans but the economic climate in Korea hardly does.

This finally reveals that the hypothesis which says 'worse economic climate leads to less number of Korean students studying abroad' is incorrect. The Korean economic climate
might affect choice of country, period that parents plan for their children abroad and expectation from their children of Korean parents, but not their actual spending which has been shown through the survey.

There are some limitations and recommendations that can improve this essay for answering the research question. If the primary research included question that asks the Korean parents actual incomes or whether there is any change in their incomes. This will allow the survey to include more recent data (2010-2011) so more accurate result and conclusion. Since the Korean people's income data is from secondary research with different time (year) with the primary data, comparing them would result less accurate data and weak evidence for the conclusion.

Moreover if it was possible to be informed where Korean parents get the money from to pay for their children's international education when they cannot actually afford their children's education from their real income, this essay could reveal the significance of finances on the demand of international education for Korean parents more clearly. Also the essay could reveal how do those behavior of Korean parents that forcing themselves to afford money for children's education affect the Korean economic climate. And its long run effects (i.e the opportunity cost of sacrificing their own life worth such as economic wants and needs).
Appendix:

1) Survey Questions (English version)

Thank you for participating in this survey. I am Hayley Ki Won park and a student at Auckland International College and I am collecting data that will be used for my economics extended essay. This survey will not be used for any commercial or political purposes. Also any gathered data will not be analyzed individually, but as an aggregate and answers are anonymous.

Please tick the appropriate answers and fill in the spaces to the questions. Please write beside the question if there is no option that represents your situation.

1. How many children do you have?
   1__  2__  3__  4 or more__

2. Do your children (child) study abroad?
   YES__  NO__  If YES, WHERE?____

3. Do you spend any money on their education apart from the compulsory school fees?
   YES__  NO__

   ★If the answer of Question 3 was 'NO', please go to Question 4 and if it's 'YES', please go to Question 5)

4. 1) If your income increases and you are financially able to spend more money on your children's (child's) education, are you willing to send your children (child) abroad?
II) How much % of your total income are you willing (able) to spend for your children's (child's) education abroad?

More than 50% ___ 50-40% ___ 40-30% ___ 30-20% ___ less than 20% ___

III) How much % of your total income is saved? (how much is your excess income after you have paid for necessities?)

More than 20% ___ 20-15% ___ 15-10% ___ 10-5% ___ less than 5% ___

IV) How many % of adults in your family member work?

0 ___ 1 ___ 2 ___ 3 ___ 4 or more ___

V) If the answer for III is not 0, what group(s) is(are) able to include your job(s)? (If your answers are more than 1, you can tick more than 1 or indicate the number beside the answer choices)

Part time job ___
Full time job ___
Self employed ___
Not willing to inform ___

VI) How long have you been in your current job?

Less than 1 year ___ 1-5 years ___ 5-10 years ___ 10-20 years ___
More than 20 years ___

VII) Have you recently (last 3 years) been unemployed?

YES ___ NO ___ Not willing to inform ___

VIII) Do you think that prices of goods and services went up in the last 3 years (i.e
inflation)

YES____  NO____  I DON'T KNOW_____

IX) If you have a chance to send your children (child) abroad, and we assume they (he/she) achieve the same academic goals, what country would you prefer to send your children (child) to? (Please tick 2)
   a) Country that has less racial discrimination.
   b) Country that has good natural environment and variable recreation programs.
   c) Country that good weather condition (better climate).
   d) Country that has cheaper fees compare to its environment.
   e) Country that has higher standard and environment to compete with students who are capable.

5. I) How many of your children are abroad?

   0____  1____  2____  3____  4 or more_____

   II) How much % of your total income is being used to send your children (child) abroad? (If you have children who study abroad more than 1, please tick in the box that you used for each child.)

   More than 20%____  20-15%____  15-10%____  10-5%____ less than 5%____

   III) How much % of your total income are you willing (able) to spend for your children’s (child’s) education?

   More than 20%____  20-15%____  15-10%____  10-5%____ less than 5%____

   IV) How much % of your total income is saved? (How much is your excess income after you have paid for necessities?)

   More than 20%____  20-15%____  15-10%____  10-5%____ less than 5%____

IV) How many % of adults in your family member work?
VI) If the answer for III is not 0, what group(s) is(are) able to include your job(s)?
(If your answers are more than 1, you can tick more than 1 or indicate the number beside the answer choices)
Part time job____
Full time job____
Self employed____
Not willing to inform____

VII) How long have you been in your current job?
Less than 1 year____ 1-5 years____ 5-10 years____ 10-20 years____
More than 20 years _____

VIII) Have you recently (last 3 years) been unemployed?
YES____ NO____ Not willing to inform____

IX) Do you think that price of goods and services went up in the last 3 years (i.e. inflation)
YES____ NO____ I DON'T KNOW____

X) What was the factor(s) that influenced when you choose the country that your children (child) are (is) studying? (please think 2)
a) The country has good education environment.
b) The country offers better opportunity to get into well-known (top 50 universities).
c) The country has cheaper education fees among the countries that have similar conditions (environment, education or safety conditions).
d) The country has less discrimination than the other countries.
e) The country offers more recreation programs than the other countries.

XI) How long would you pay for your children's (child's) education abroad?
Anytime they (he/she) want(s)____
Until they (he/she) graduate(s) university____
Until they (he/she) graduate(s) high school____
Until they (he/she) graduate(s) intermediate school

Until they (he/she) graduate(s) primary school

XII) Have you (are you) ever considered (considering) to stop your children's (child's) education abroad? (if it's 'YES', please continue)

YES ___

NO ___

XIII) If you have (are), when was it? (you can tick more than 1)


I DON'T KNOW______

XIV) If you have (are), what was the reason?

a) Financial problem
b) Children's (child's) maladjustment to the foreign environment
c) A sense of distance between family members
d) Others ________________________________ (please write your own reason.)

Thank you very much 😊
이 설문 조사에 응해 주셔서 감사합니다. 저는 오컬랜드 국제 고등학교 (AIC)에서 공부중인 박기원 (Hayley Ki Won Park) 입니다. 저는 저의 증점예비 (Extended Essay) 과정에서 경제 과목을 선택 하였고 이 설문조사지는 저의 에세이를 위해 사용될 데이터를 얻기 위한 것입니다. 설문조사 결과는 상업적 또는 정치적으로 이용되지 않을 것이며 답변들은 개인적으로 연구 되지 않을 것입니다. 또한 모든 설문자는 의명으로서 이용될 것입니다.

질문에 답하기 위해서 주어진 공간 안에 체크 해주십시오.
만약 당신의 답이 응선으로 주어 지지 않았다면 엮에 당신의 답을 적을 수 있습니다.

1. 몇 명의 자녀가 있으십니까?
   1명____  2명____  3명____  4명 이상____

2. 당신의 자녀 가운데 유학생이 있습니까?
   예____  아니오____  만약 '예'라면 어느 나라에서 공부합니까?

3. 당신은 의무교육(공교육 예, 초,중학교)을 제외한 자녀의 교육을 위해 돈을 투자하고 계십니까?
   예____  아니오____

★2번 문제에 '아니오'라고 답하신 분은 4번 질문으로 가주세요.
2번 문제에 '예'라고 답하신 분은 바로 5번 질문으로 가주세요.

4. Ⅰ) 만약 당신의 수입이 증가하고 당신이 경제적으로 자녀의 유학비용을 대는데 문제 가 없을 때 당신은 자녀들을 유학 보내실 겁니까?
   예____  아니오____

Ⅱ) 당신은 당신의 수입 중 몇 %가 자녀의 교육에 사용될 수 있고 사용되기 를 원하실까요?
   20% 이상____  20-15%____  15-10%____  10-5%____  5%이하____
Ⅲ) 당신의 수입 중 필수적인 지출 후 몇 퍼센트(%) 정도가 남습니까?

20% 이상____ 20-15%____ 15-10%____ 10-5%____ 5%이하____

Ⅳ) 당신의 가족 구성원 중에서 몇 명의 성인이 직업을 가지고 있습니까?

0명____ 1명____ 2명____ 3명____ 4명 이상____

Ⅴ) 만약 위의 답이 0이 아니라면 어떤 종류의 직업을 가지고 계십니까? (만약 당신의 답이 하나 이상이라면 여러 개 체크하시거나 보기 열에 숫자로 적으시면 됩니다.)
시간 제 (비 정규직 또는 아르바이트)____
정규직____
사업____
대답하지 않았음____

Ⅵ) 당신이 현재의 직업을 가진지는 얼마나 되셨습니까?

1년 이하____ 1-5년____ 5-10년____ 10-20년____ 20년 이상____

Ⅶ) 최근 3년간 실직하신 적이 있으십니까?

예____ 아니요____ 대답하지 않았음____

Ⅷ) 당신은 최근 3년간 물건이나 서비스 가격이 인상되었다고 생각하십니까? (인플레이션)

예____ 아니요____ 잘 모르겠습니다____

IX) 만약 당신이 당신의 자녀(들)을(을) 외국에 보낼 수 있고 그들이 동일한 교육적 목표를 달성한다고 가정할 때 어떤 나라로 당신의 자녀들이 가길 선호하십니까? (두 가지를 선택해 주십시오.)
a) 인종차별이 적은 나라
b) 좋은 자연적 환경과 다양한 레크레이션 프로그램이 제공되는 나라
c) 대체적으로 좋은 날씨 (기후)를 가지고 있는 나라
d) 환경 (교육적, 기후적, 사회적)에 비해 저렴한 비용이 드는 나라
e) 높은 사회적 수준과 교육적으로 경쟁력이 있는 나라.

5. I) 몇 명의 자녀가 외국에서 공부 중입니까?
Ⅱ) 유학하는 자녀의 교육비는 가계 수입의 총 몇 % (퍼센트)를 차지합니까? (한 자녀당)
50% 이상____ 50-40%____ 40-30%____ 30-20%____ 20%이하____

Ⅲ) 당신은 당신의 수입 중 몇 퍼센트(%)가 자녀의 교육에 사용 될 수 있고 사용되기 를 원하십니까?
20% 이상____ 20-15%____ 15-10%____ 10-5%____ 5%이하____

Ⅳ) 당신의 수입 중 필수적인 지출 후 몇 퍼센트(%) 정도가 남습니까?
20% 이상____ 20-15%____ 15-10%____ 10-5%____ 5%이하____

Ⅴ) 당신의 가족 구성원 중에서 몇 명의 성인이 직업을 가지고 있습니까?
0명____ 1명____ 2명____ 3명____ 4명 이상____

Ⅵ) 만약 위의 답이 0%가 아니라면 어떤 종류의 직업을 가지고 계십니까? (만약 당신의 답이 하나 이상이라면 두 개 이상 체크하시거나 보기 열에 숫자로 적으시면 됩니다.)
시간 제 (비 정규직 또는 아르바이트)____
정규직____
사업____
대답하지 않겠음____

Ⅶ) 당신이 지금 현재 직업을 가진지는 얼마나 되셨습니까?
1년 이하____ 1-5년____ 5-10년____ 10-20년____ 20년 이상____

Ⅷ) 최근 3년간 실적하신 적이 있습니까?
예____ 아니요____ 대답하지 않겠음____

Ⅸ) 당신은 최근 3년간 물건이나 서비스 가격(물가)이 인상되었다고 생각하십니까?
(인플레이션)
예____ 아니요____ 잘 모르겠습니다____

第十) 어떤 요소들이 당신이 유학 보내는 나라를 결정하는데 영향을 끼쳤습니까?
(두 가지를 선택해주세요.)
a) 좋은 교육환경을 가지고 있는 나라
b) 잘 알려진 대학진학이 유리한 나라 (예, 상위 50위 대학들)
c) 비슷한 환경(주변환경, 교육환경, 지안상태 등)의 나라들에 비해 저렴한 교육비를 가진 나라
d) 다른 나라에 비해 각종차별 (성, 인종 또는 계급적)이 적은 나라
e) 다른 나라에 비해 많은 레크레이션 프로그램들을 제공하는 나라

X I) 얼마나 오랫동안 당신은 당신의 자녀의 유학을 위해 지출하실 겁니까?  
언제든지 그들 (그, 그녀가 원한다면____)  
그들 (그, 그녀가 대학을 졸업할 때까지____)  
그들 (그, 그녀가 고등학교를 졸업할 때까지____)  
그들 (그, 그녀가 중학교를 졸업할 때까지____)  
그들 (그, 그녀가 초등학교를 졸업할 때까지____)

X II) 당신은 한번이라도 자녀의 유학에 대해 다시 생각해보신 적이 있습니까? (혹은 현재 고민하고 계십니까?)  
예____  
아니요____

X III) 만약 그리시다면 그 시기가 언제였습니까? (한 가지 이상 체크하실 수 있습니다.)  
2009-2011년____  잘 모르겠음____

X IV) 만약 그리시다면 그 이유는 무엇입니까?  
a) 경제적 이유  
b) 자녀의 유학생활 부적응  
c) 가족간의 거리감  
d) 기타__________________________ (주관적으로  
답해 주십시오.)

감사합니다.
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