

Score row	Total number of points earned: 28 (out of 42 possible points)	Scoring Commentary
IWA-1	4	The scope of the research question made it difficult to adequately address in the essay.
IWA-2	4	The essay seemed to assume that high birth rates were not desirable, without discussing the fact that very low birth rates also have undesirable economic impacts, although did mention problems when mortality rates surpass birth rates.
IWA-3	4	The argument uses a wide range of evidence but not all of it was carefully synthesized (e.g., connection between British colonialism, EEC and fertility rates).
IWA-4	4	The essay attempts to establish credibility for some sources of evidence but is not consistent.
IWA-5	4	The argument is not always well reasoned, for example, making claims about all developing countries based on sample of countries from Africa or making inferences about the role of political unrest and fertility rates.
IWA-6	4	The essay attempts to link claims and evidence, but overstates the connections in some instances (decrease in fertility rate due to exodus of segment of population; stating that third world nations have similar patterns as first world nations, but only one of the nations discussed seemed to be similar, etc.).
IWA-7	2	The references are listed but not clear how all of them were referenced. Some have footnotes; others are listed at the end of the paper, but the two lists do not appear to be the same.
IWA-8	2	The essay contains sentence fragments and awkwardly worded phrases that interfere somewhat with the communication.

How do the fertility rates of first and third world countries differ, and what instigates the spikes and overall trends in regards to fertility rates?

When many people are asked how fertility rates may be related to the economy, they will most likely respond with a questioning glance. After a little thought, most will claim that less money equals more children, which is understandable, given how poverty is often depicted in literature and the media. When faced with the facts, however, it is clear that this is not exactly correct, and although specific information could not be gathered for every existing nation, patterns are evident in those that will be discussed in this essay.

Fertility rate as it will be referred to in this essay is defined as “The average number of children that would be born to a woman over her lifetime if she followed the current average pattern of fertility among a given group of women and survived through her reproductive years”¹

Fertility rates were taken into account alongside economic conditions, as well as historical and political context for each given nation. Among the developed nations that were taken into account for this research, the United States was the first to be explored. A graph depicting the United States’ fertility rates (Mather) shows two distinct drops in the rate of fertility. The first occurring throughout the course of the Great Depression, one of the greatest examples of economic downturn in the United States history (extending from 1928 to 1940) shows a decrease in fertility rates from approximately 3.5 children per woman to 2.0 children per woman by the resolution of the Depression. Once the economy restabilized, the fertility rate increased dramatically. This was also in part due to the “Baby Boom,” in which record numbers of babies were born between the years 1946 and 1964, beginning after the end of World War II (History.com). Though very soon after the “Baby Boom” began to taper off, the

¹ "Definition of Fertility rate - Sociology - Boundless." 2013. 17 Dec. 2013
<<https://www.boundless.com/sociology/definition/fertility-rate/>>

fertility rate began a rapid downward slope leading into the 1970's energy crisis, where the fertility rate never really recovered due to the "Great Recession," and has continued to decrease until 2012 where it comes "...pretty close to grinding to a halt," according to Carl Haub (a demographer of the Population Reference Bureau) as he states in an article of the NewYorkTimes. (Tavernise)

Canada, which is also considered a developed nation, had a similar stock market crash in 1929, similar to the one experience in the United States. Also similar to that of the United States, there was a major dip in fertility rates which correlates with the economic downturn as a result of the crash (Statistics Canada). The worst of the economic conditions occurred in 1932 and 1933, which correlates with the lowest fertility rates Canada experienced. Their fertility rates do not rise up again until the late 1930's, when the economy begins to recover (Canada History).

The United Kingdom also has similar experiences to that of the United States and Canada, though instead of facing drops in fertility rates as a result of economic depression, the United Kingdom was affected, more so, by the results of war. Seen on a graph provided by MigrationWatch UK (chaired by Sir Andrew Green) The first significant drop occurring in the past millennia happened in the 1940's ("Population Growth- Migration or Birth rate?"), where the end of World War II brought about British defeats in 1940 and 1942 left Britain economically depleted and unstable. The second major drop, in the 1960's, came about during a time in which Britain, in an attempt to jumpstart their stagnant economy, tried to enter the European Economic Community. They were denied. In addition, they hastily backed out of all of their remaining colonial involvement in order to avoid costly nationalist conflicts as a result of their poor economic conditions. (BBC)

In regards to the research on these developed nations, it can be seen that the overall trend in regards to dips and spikes in fertility rates is a direct correlation to the economy of the country. What

can also be seen is that in many of these cases is that the variations can be quite drastic, a steady fertility rate can plummet in a very short amount of time if the economic or political conditions are right (as is evident in the stock market crashes of both Canada and the United States). Though do these patterns continue with undeveloped nations? It would be reasonable to assume that, due to widespread poverty in third world nations, their fertility rates would decrease when the economic or political prosperity increased as a result of factors such as more widely attainable methods of contraception, fewer sex-related violence, etc. Although based on similar research, that is not the case, as it appears that third world nations share similar patterns as those of first world nations.

In regards to the third world, Madagascar was one of the nations randomly chosen to be viewed for comparison². There are major drops in fertility rates between the years 1974 and 1982, followed by a slight increase, only to be followed by another drastic drop from 1989 to 2009 with a continuous downward trend. Upon further inspection, the drop beginning in the 70's corresponded with a time in which the country was undergoing democratic political reform, as well as the nationalization of its economy where-in it adopted increased state control. The second drop comes about during a time of major political backlash and civil unrest within the nation, as large demonstrations and civil service strikes take place in retaliation of the Madagascar president. In the years following the initial start of the fertility decline, more protests against the political leaders of the nation, and governmental corruption appears to be prevalent. ("Madagascar: Timeline- A turbulent political history") Even in recent years, military action against civilians and political protests remain common in the nation, which may explain the continuous downward slope of Madagascar's birth rates.

Not all third world countries experience such sporadic patterns in their rate of fertility, however.

² "Madagascar - Fertility rate - World Data Atlas - Knoema." 2012. 17 Dec. 2013
<<http://knoema.com/atlas/Madagascar/Fertility-rate>>

In the country of Somalia, the fertility rates have remained relatively steady, save for one minor dip beginning in the year 1975.³ During that time, the military government under the control of Mohamad Siad Barre imposed a system of “Scientific Socialism” which resulted in the nationalization of many economic enterprises (such as banks, oil companies, insurance firms, among other things). The effects of such reforms crippled Somalia’s economy, only to have it weakened further as a result of civil war, due to a lack of a sufficient military regime.

Uganda, though having one of the highest overall fertility rates in the world (currently ranked at number four)⁴ has remained at a steady rate since the 1960’s, with no notable dips or spikes. Instead, maintaining a subtle upward slope that began in approximately 1996. Even in the mid to late 1900’s, despite being in the throes of war and violence over border disputes and political conflict, the Ugandan birth rates still remained at a constant high.(British broadcasting)

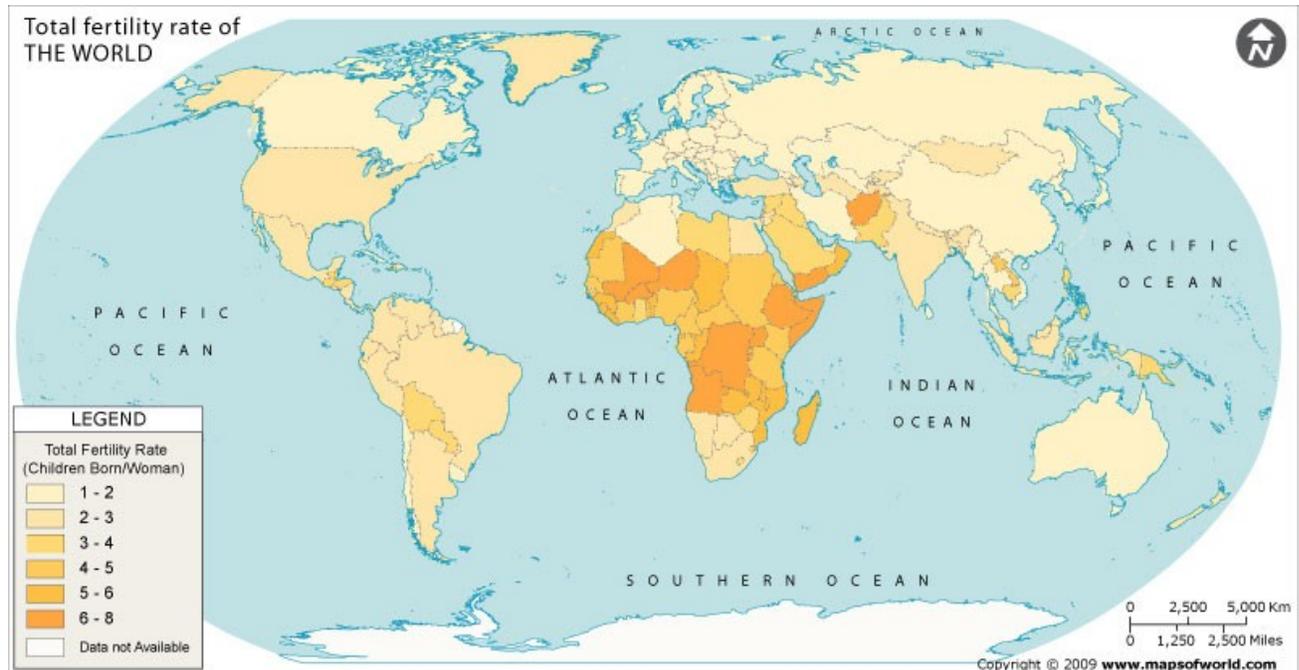
Finally Niger, the nation with the highest global fertility rate, has had a relatively steady downward slope since the 1960’s⁵. This trend is very gradual, and depicts a plateau between the 1980’s and 1995. Prior to the 1960’s, Niger was French-Occupied, then after becoming an independent nation, experienced a decrease in fertility rates. This decline could be attributed to the outward migration of some of the former French occupants, as well as a bad drought which the nation faced in 1968. A drought which negatively affected the livestock and crop production until 1973. What’s more, Niger faced an economic collapse in the late 1970’s and early 1980’s. Such a collapse created tension between various nationalities and ethnic communities, and added to the political pressure to do away with over 2 million illegal workers between 1983 and 1985 (Niger Profile). With such a

³ "Somalia - Birth rate - Mundi." 2011. 17 Dec. 2013 <<http://www.indexmundi.com/facts/somalia/birth-rate>>

⁴ "The World Factbook - Central Intelligence Agency." 2007. 17 Dec. 2013 <<https://www.cia.gov/library/publications/the-world-factbook/rankorder/2127rank.html>>

⁵ "Niger - Birth rate - World Data Atlas - Knoema." 2012. 17 Dec. 2013 <<https://knoema.com/atlas/Niger/Birth-rate>>

decrease in population, it can be inferred that the fertility rates were also negatively affected as a result.



Map based on Total Fertility Rate worldwide estimated for the year 2009

Excluding Madagascar (which ranks number thirty-three) Somalia, Niger, and Uganda are listed among the top ten nations with the highest fertility rate. While The United States, Canada, and The United Kingdom all lay much closer to the bottom. This shows that third world countries, overall, experience a higher average birth rate than do first world countries. With poorer nations averaging 5-7 children, and richer nations averaging 1-2.

Although patterns in the correlation between economic/political conditions of a nation and the nation's fertility rate are evidently similar, it seems as though first world nations experience more drastic spikes in their fertility rates when economic downturn or political unrest strikes, as opposed to many third world nations. Developed nations have a lower fertility rate overall when the economy and politics

are normally stable. Whereas undeveloped nations maintain their high fertility rates, even when unexpected political and economic downturns occur. Even the lowest points in the history of many third world nations are higher than the average of a first world nation such as the United States. This could be attributed to the fact that undeveloped nations are already classified by their lack of a substantial, stable governments and poor economic conditions.

According to a study performed by the United Nations Department of Economic and Social Affairs (UNDESA), they provide a similar outlook on the correlation between fertility rates and a country's economic and social rewards that arise as a result of keeping them at a steady, reasonable rate. The primary function of the UNDESA is to work closely with national governments in order to solve problems related to their economic, social, and political goals, so their research seems credible in the struggle to understand where problems in these nations lie. Brigid Fitzgerald Reading, a staff researcher of the Earth Policy Institute, describes the situation in her article,

“Fertility rates tend to be highest in the world's least developed countries. When mortality rates decline quickly but fertility rates fail to follow, countries can find it harder to reduce poverty. Poverty, in turn, increases the likelihood of having many children, trapping families and countries in a vicious cycle.”

Also, according to cartograms provided in an article by Anna Barford and Danny Dorling (The Shape of Global Causes of Death), childhood cluster deaths are shown as being remarkably high in third world nations such as those in Africa. Other causes of death such as those from communicable, maternal, perinatal, and nutritional conditions also show high rates of mortality. When a country, especially a developing unindustrialized country, has fertility rates rising higher than their death rates, it

leads to a surplus of dependents (children still relying on their parents) that outnumber the population of working adults that provide for them. This in turn causes the country to remain in poverty, and children raised in such conditions are more likely to have many children themselves starting at a young age, fueling the fire and furthering already unfavorable economic circumstances.

The same article includes research that states that higher education levels results in lower fertility rates and less poverty. Countries where more children are enrolled in school are less likely to have such high fertility rates, even if those children only go up to the primary education level. This is especially true in countries where females in particular are allowed an adequate education, as they are less likely to have as many children in adulthood, and children they *do* have are more likely to be healthier and taken care of, and also more likely to go to school themselves.

Schools do more than provide an education in these instances as well, school meal programs boost attendance tremendously in third world nations. They provide food for the child while they are at school, as well as food to take home to their families in some cases, which provides compensation for the funds the family is required to put towards their child's education, whether it be in the form of school tuition or labor the child would have otherwise provided at home. (Fitzgerald Reading)

Based on such findings regarding the correlation of a country's economic conditions and their rate of fertility, and given the knowledge that a country's economic conditions are very strongly linked to their rate and quality of education, it can be reasoned that if third world nations had access to a better education they could also bring their fertility rate to a more reasonable one and, in turn, ease the economic burdens and political conflicts brought about by such a quickly growing population.

Through minimal first world aid, it is possible to provide educational programs to these nations

through institutions such as buildOn⁶, Room to Read⁷, Give Well⁸, and many other foundations and charities whose purpose is to provide educations to those children in third world nations. If more people knew that many of the issues faced by developing countries have their roots in a lack of education, more would be willing to donate towards such causes and possibly contribute towards drastic improvements in their overall development.

⁶ "Building Schools | buildOn." 2013. 17 Dec. 2013 <<http://www.buildon.org/global-school-building/>>

⁷ "School Construction - Room to Read." 2012. 17 Dec. 2013
<<http://www.roomtoread.org/SchoolConstruction>>

⁸ "Economic empowerment charity (international) | GiveWell." 2010. 17 Dec. 2013
<<http://www.givewell.org/international/economic-empowerment>>

Mather, M.. N.p.. Web. 16 Dec 2013.

<<http://www.prb.org/Publications/Datasheets/2012/world-population-data-sheet/fact-sheet-us-population.asp&xgt;>>.

History.com, . N.p.. Web. 17 Dec 2013. <<http://www.history.com/topics/baby-boomers>>.

Tavernise, Sabrina. "Fertility Rate Stabilizes as the Economy Grows." *www.nytimes.com*. New York

Times, 06 Sep 2013. Web. 17 Dec 2013.

<http://www.nytimes.com/2013/09/06/health/fertility-rate-stabilizes-as-the-economy-grows.html?_r=0>

Canada History, 0. <http://www.canadahistory.com/sections/eras/crash_depression/Crash.html>. Statistics Canada. Statistics Canada, 2013. 0. <<http://www.statcan.gc.ca/pub/84f0210x/2008000/ct004-eng.htm>>.

"Population Growth- Migration or Birth rate?." *www.migrationwatchuk.org*. MigrationWatch UK, 28

Jan 2010. Web. 17 Dec 2013.

<<http://www.migrationwatchuk.org/briefingPaper/document/180>>. "BBC - History - British History in depth: Britain, the Commonwealth ..." 2007. 10 Dec. 2013 <http://www.bbc.co.uk/history/british/modern/endofempire_overview_01.shtml>

"Madagascar: Timeline- A turbulent political history." *www.irinnews.org*. IRIN-Humanitarian News and

Analysis. Web. 17 Dec 2013.

<<http://www.irinnews.org/report/88457/madagascar-timeline-a-turbulent-political-history>>.

British broadcasting, C.. N.p.. Web. 17 Dec 2013.

<<http://www.bbc.co.uk/news/world-africa-14112446>>.

Niger Profile.. Web. 17 Dec 2013. <<http://www.bbc.co.uk/news/world-africa-13944995>>.

Fitzgerald Reading, Brigid. N.p.. Web. 17 Dec 2013.

<http://www.earth-policy.org/data_highlights/2011/highlights13>.