Introduction

Many academics have studied labor capital and its relation to the economy for centuries. Economists, social scientists, political scientists, etc. have pondered the vast grounds that lie between the economy and capital. Many have derived theories of their own, theories that pose the question: how much economic freedom is best suited for the means of production within a society to produce the most suitable amount of output? For instance, Karl Marx, a household name and forefather of the idea of communism, the author of the Communist Manifesto, believed that the bourgeoisie was the downfall of Europe, and that the government should control the economy and capital. He states, “Modern bourgeois society with its relations of production, of exchange, and of property, a society that has conjured up such gigantic means of production and of exchange, is like the sorcerer, who is no longer able to control the powers of the nether world whom he has called up by his spells.” (Marx 1848) This spectrum of government involvement in the economy is far reaching however, and many would disagree with Marx’s founding principles. For instance, Adam Smith, a proponent for capitalism believed that with the presence of economic freedom, and the absence of government interference in the labor market, fierce competition would emerge, bolstering a successful economy. Smith states, “In general, if any branch of trade, or any division of labour, be advantageous to the public, the freer and more general the competition, it will always be the more so.” (Smith 1904, 31)

There are several schools of thought that support capital and economic freedom. The term capital however is usually described as something tangible. For instance, a tractor would be known as a piece of capital used for labor, therefore, the tractor would fall under the “labor capital” category. Similarly, for this research paper we will uproot the idea of social capital, a form of capital that is not tangible, but rooted in trust in one’s fellow countrymen and the government, which, until the 1990’s was a topic that was unheard of.

One we have a firm understanding of social capital, and the many theories and explanations that hide behind the curtain of the term, we will look at economic freedom. As discussed earlier, the economy and the amount of government interference within it, is up for debate. Furthermore, using these two highly debated and contentious terms, we will seek to find a relationship or possible correlation between the two terms that we will use as variables for an analytical test. To do this, we will run a test for statistical significance using every country in the world that is on record for our respective websites. We will use economic freedom as our independent variable, or the variable that may explain our dependent variable, social capital. In the end, we will determine whether or not the two show a positive correlation, negative correlation, or if they show any correlation at all.

Social Capital

Social capital is a word rarely used when discussing the capital of a country, although, the word constitutes a large portion of the capital that makes a nation. According to Robert Putnam, widely known as the leading scholar in his field, and author of the book Bowling Alone, “social capital is described as features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions.” (1993, 167) While the definition of social capital is not “bulletproof,” the overwhelming majority of social scientists and politicians would agree that trust is substantial in regard to social capital, and a country’s measurement thereof. Whether it is trust in fellow countrymen, law enforcement, or the government of a country, each subcategory of trust funnels into what we know as social capital.

According to Ben Fine, author of “Social Capital,” “Social capital as a concept rose to prominence during the 1990’s, towards the latter half as far as development is concerned.” (Fine 2007, 567) Fine goes on to say, “Robert Putnam, undoubtedly the most cited author on the subject, narrowed the idea down to two words, social capital.” (Fine 2007, 568) Succeeding the genesis of the term social capital, in the 1990’s thousands of scholars jumped on the bandwagon and began
to create theories of what they believed social capital consisted of. To date there is no concrete group of words to perfectly define the term, however, there are several theories, like Putnam’s that certainly hold weight in the field.

Bram Lance, a well-known scholar on the subject, and author of *Immigrant Performance in the Labour Market*, has his own theory of what he believes promulgates the term. He states simply, “One of the main insights in contemporary social science is that no man is an island. People are embedded in the social networks that they form and these networks affect their lives.” (Lance 2012, 3) These networks, formed through human interaction can act as a network that social scientists and political scientists like to classify as social capital. Furthermore, people can use these networks to improve their standard of living, which, consequentially, will allow them to “better attain their goals.” (Lance 2012, 4) “People will invest in relationships in view of the prospective value of the resources made available by these relations.” (Lance 2012, 4) Therefore, by benefitting from each other’s capital in society, we derive the term “social capital.”

As stated earlier, trust is without question the most obvious factor related to social capital. The correlation between economic growth and social capital has been investigated on several occasions, and many scholars have come to distant conclusions as to whether social capital has an impact on the economy. More specifically, the preponderance of works cited on the subject deal with the correlation of social capital and economic growth. Stephen Knack and Paul J. Zak, highly regarded economists emphasize the premise that social capital has a large impact on the economy and its success. They state, “Interpersonal trust has a considerable effect on economic growth as trust affects the transactions cost associated with investment.” (Knack and Zak 2003, 92) When going over the many works on the subject of social capital and the economy, it is evident that social capital is clearly related to economic growth. While this information is certainly useful and attention grabbing, for this research analysis, we will attempt to flip the script and look at a possible correlation between social capital and economic freedom, rather than economic growth.

**Economic Freedom**

In his best selling book, Karl Marx, a prodigy in communist field of thinking, derived a theory known as communism. Although he is not known as a “capitalist”, it was in his book *Das Kapital* when the term came into fruition. (Marx 1867) Marx believed that capitalism was “widely used to describe an economic system based on private property as the means of production.” (Marx 1867) Ineptly, capitalism, and its definition have transformed over the years. Today, capitalism is a system of open market where citizens, rather than the government, control the production of and means of labor.

From a global perspective, nations like Switzerland and the United States engage in separate forms of what economists would refer to as capitalism. Ultimately, the term is describing little government interference in the market, so that private entities of labor will engage in a fluid competition of labor, deriving endless opportunities of business without the government interfering in their actions at all, or only slightly. According to Investopedia, “Free market refers to an economy where the government imposes few or no restrictions and regulations on buyers and sellers.” (Investopedia 2019) Moreover, “Many governments control money supply to minimize the negative effects of natural economic expansion and contraction.” (Investopedia 2019)

Like all things, there are some problems with this economic system. Many scholars in support of socialism and other economic systems claim that a capitalist society can be devastated in an instant. A few examples of this have taken place over the last century in the United States, arguably the most impactful being the Great Depression during the late 1920’s and 1930’s. Christian Bjornskov, a scholar, and author of “Arguments against economic freedom” claims that there are three major flaws intertwined in a capitalist society. He states, “Policies and institutions can, in principle, be associated with the crises in three ways. First, they can affect the volatility of domestic economic development and the way international business cycles are propagated to the economy.” (Bjornskov 2012, 1347) Second, “Economic policies can affect the aggregate demand reaction to crises. Third, economic policies and institutions can affect the supply response to crisis, and in particular the flexibility of the economy when resources are to be relocated from uses made either redundant or unprofitable by the crisis shock.” (Bjornskov 2012, 1348) Furthermore, capitalist societies do not deal well with sudden alteration such as a crisis, where as a communist society “does not suffer economic crises due to international shocks or domestic command collapse.” (Bjornskov 2012, 1348) Moreover, although capitalism and a free market works well for some countries, not all governments would agree that it is the best economic system.

As stated, capitalism is only one form of economy, a system in which the economy is rarely regulated and the citizens of the country compete to produce a better product than their competitor in an effort to make profit. Socialism, another form of economy is miles away from capitalism on the imaginary scale of economic freedom. Robert Heilbroner, a renowned scholar and author of “Socialism,” an article determining the fundamentals of a socialist economy, states, “Socialism is defined as a centrally planned economy in which the government controls all means of production.” (Heilbroner 2017) Therefore, citizens do not have the freedom of economy experienced by capitalist societies. According to
Heilbroner, socialism was “Born of a commitment to remedy the economic and moral defects of capitalism, it has far surpassed capitalism in both economic malfunction and moral cruelty.” (Heilbroner 2017)

Like capitalism, the founding of socialism is devoted to Karl Marx. (Heilbroner 2017) The idea found its name as a blueprint for a society free of competition. The idea was “driving the incentives of profit seeking or the self-generating constraints of competition.” (Heilbroner 2017) However, the term is no longer a blueprint. Today, there are numerous examples of governments playing their hand in their respective economic markets, for instance: Cuba, China, and Sweden.

Socialist economies bare flaws as well. Most notably, “it essentially calls for equal distribution of wealth.” (Wong and Zhou 2018) The problem with this idea is this: if everyone is working for an equal portion, how do you reward someone who is putting in the extra hours, or working a more difficult task? This is the issue, Ben Shapiro, a well-known conservative capitalist said this at a convention known as Politicon, “If you believe in equal outcome you are a Socialist, however, if you believe in equal opportunity you are a capitalist.” (YouTube 2018) Moreover, it is beneficial for government to interfere in economic policy to some extent, but when they are the sole owners of the means and production of labor, the distribution of wealth being in their hands can be a pro or a con.

Communism is the furthest point on our economic spectrum and is usually cast away from economic discussion because no country in the world is a fully communist state, at least according to Karl Marx’s definition of communism. According to Marx, “Communism is a society without class divisions... or any government. In that perfect world, everyone would be perfectly working for the public, and at the same time receiving whatever they needed from publicly owned institutions.” (Zhou and Wang 2018) Therefore, for the essence of this paper, we will be using a fully capitalist system as one that is economically known as “free,” and socialist system, one that is the transition between capitalism and leaning toward communism, for societies that are economically “less free.”

Now that the reader has an idea about social capital, and economic freedom, it is time that we run an analytical test to determine a possible correlation between the two. To do this, I will use the analytical model for my research design.

**The Analytical Model**

The analytical model is made up of many components. First, I must derive a theory a general idea about something that is unstated. Next, a hypothesis, a more specific idea about the point of interest that is testable through research. For my hypothesis, I will have an independent and dependent variable. In essence, an independent variable is the variable that will try and explain the dependent variable. Therefore, the dependent variable “depends” on the independent variable.

**My Analytical Test**

For my research my theory will be this: Economic freedom and social capital host a relationship. My hypothesis is this: There is a strong positive correlation between economic freedom and social capital. Moreover, a country with a great deal of economic freedom will also have a high level of social capital. Ultimately, I believe that my independent variable (economic freedom) will explain my dependent variable (social capital).

Now that the reader fully understands the premise of the research conducted throughout this paper, it is time that we look at the statistical test that was initiated in an effort to find a significant relationship between the variables economic freedom and social capital.

Before we investigate the evidence of a possible correlation between the two variables, it is empirical that the reader fully understands what a test of significance, better known as a T-test, actually consists of. Del Siegle, a scholar, and a member of the Educational Research Team at the University of Connecticut describes a T-test in this way, “The t test is one type of inferential statistics. It is used to determine whether there is a significant difference between the means of two groups. With all inferential statistics, we assume the dependent variable fits a normal distribution.” (Siegle 2019)
Moreover, “When we assume a normal distribution exists, we can identify the probability of a particular outcome. We specify the level of probability we are willing to accept before we collect data (p < .05 is a common value that is used).” (Siegle 2019) We then compare our critical value to see if it falls within a level of significance. (Siegle 2019) For this essence of this paper, I will use IBM SPSS Statistics, a mathematical computation application to determine our level of significance.

It is also important that the reader understand the variables that are attributed to the scores of both variables. Moreover, as stated earlier, social capital is loosely defined; however, the index that I found through solability.com, an intelligence website, is measured using several entities that fall under the category of social capital. The website defines social capital in this way, “The Social Capital of a nation is the sum of social stability and the well-being (perceived or real) of the entire population. Social Capital generates social cohesion and a certain level of consensus, which in turn delivers a stable environment for the economy, and prevents natural resources from being over-exploited.” (Solability 2019) The following image are the variables that were used to determine an aggregate score for a country’s social capital.

For my second variable, economic freedom, I used the Heritage Institute, which provided me with an index, rank, and score for each country. Economic freedom is slightly more explanatory then social capital, however, it is important to know which increments of measurement were used to determine the country’s overall score. The Heritage Institute used Rule of Law, government size, regulatory efficiency, and open market as their variables of measurement. (Heritage 2019) Rule of law entails judicial effectiveness, government integrity and property rights. Government size involves government spending, tax burden, and fiscal health. Regulatory efficiency describes a nation’s business and labor freedom, as well as its monetary freedom. Open market explains a country's trade, investment and financial freedom.

I have now explained the analytical method, the variables I will use, my predictions of the outcome, the tests I will use, and how the variables are measured. Now time to look at the tests that I have completed and come to a conclusion about the outcome, and why it may be that way.

This graph displays the ranking of a portion of the countries that I examined in regard to economic freedom, my independent variable. Unfortunately, I wasn’t able to create a graph to include all 180 countries, however, with the excel...
sheet that I will include at the end, the reader will be able to determine which bar represents a specific country, even the ones that are not labeled. Since all of the countries cannot be displayed here, I will now list the top ten countries that were ranked economically the most free, and the bottom ten countries ranked the least economically free.

The countries that are the most free are in the following order: Singapore, New Zealand, Switzerland, Australia, Ireland, United Kingdom, Canada, United Arab Emirates, Taiwan and Iceland.

On the contrary, the last ten ranking countries of economic freedom were as follows: North Korea, Venezuela, Cuba, Eritrea, Republic of Congo, Zimbabwe, Equatorial Guinea, Bolivia, Timor-Leste, Algeria.

Similar to Economic Freedom, I could not create a graph large enough to include all 180 countries that would be legible. Therefore, several countries are listed here, and if you look at the excel sheet, you will be able to fill in the bars that are unnamed. I will now display the top ten countries with the highest social capital rankings, as well as the last ten countries.

Countries with the highest level of social capital include: Norway, Luxemburg, Iceland, Finland, Germany, Switzerland, Japan, South Korea, and Switzerland.

Countries with the lowest levels of social capital: Kiribati, Swaziland, Fiji, Guyana, Gambia, Lesotho, Yemen, Haiti, Egypt, and Jamaica.

The chart displayed to the right is the result of a linear regression test that I ran using IBM SPSS Statistics, a mathematical...
computation application. When looking at the results, the data may seem slightly complicated if the reader is not familiar with a regression test, so I will now explain the data.

If you look at the far-right column of the regression test, you will witness the column labeled “sig,” which is short for significance. Ultimately, the numbers you see (.000) means that the t-statistic from the two variables host a very strong significant relationship. Moreover, the .000 indicates that we can be 99.9% certain that there is a relationship between the two. If you examine the column labeled “t” you will see a indicating that the relationship that we see is a positive one. Furthermore, as a country’s level of economic freedom increases, so does their level of social capital. Contrarily, as a country’s economic freedom score decreases, so does its level of social capital. Thus, my hypothesis is accurate.

This scatterplot displays each country, its economic freedom and social capital score. The line that runs through the middle of the countries is the line of best fit, in other words, the closer a country is to this line, the more strongly correlated it is to our relationship. Also, if the reader were unaware, the further right a country is on the scatterplot the more economic freedom it has. Along with this, the higher a country is on the economic freedom measure, the higher its social capital score.

Conclusion

For the majority of countries, we see that the higher level of economic freedom they display, the higher their social capital score is. One may argue this is not the case for all countries, and this would be an accurate assumption. Furthermore, there are certainly outliers; for instance, the United States ranking 129 in social capital out of 180 countries, and ranked twelfth in the index for economic freedom. The reason for this however, is our nation’s high crime rate, and the implementation of socialist government policies such as our system of healthcare. Contrarily, there are counties that rank moderately on the scale of social capital, but rank highly on the economic freedom scale. For example, Equatorial Guinea, Maldives, and Mongolia. This is most likely due to nationalism, or a tight knit community, even though the government has a large hand in the economy of these countries. While there is no denying that some of the countries listed do not follow the strong correlation that I have found during the process of my research, the greater majority of the 180 countries do, which is a beneficial find, and noteworthy for countries struggling with social capital.
References


