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The Relationship between Economic Freedom and Socio-Economic Development

Abstract

The aim of this paper is to determine if increased economic freedom leads to improvement in the quality of life. This paper will also examine how the rate of liberalization impacts the quality of life.

The Relationship Between Economic Freedom and Socio-Economic Development

Anisha Madan

I. Introduction

International trade economists and the World Bank have typically argued that an open trade regime is very important for economic growth and development. This view has been based on the neoclassical trade theory, for example the theory of welfare economics of international trade (Murray C. Kemp and Henry Y. Wan, 1993), which states that trade liberalization improves a country's welfare. Neo-classical trade theory is based on causal empirical observation that countries that remain highly protected for long periods appear to suffer significantly. It is also based on empirical work by economists such as Heckelman who find trade liberalization beneficial to welfare and growth. Globalization and competitive markets lead to free and unrestricted standards, policies, markets, and economies. Based on this understanding, globalization can be equated to "economic freedom". The level of economic freedom will indicate the country's level of globalization.

However, whether these benefits and "increased economic growth rates" translate into something real and make a significant contribution to socio-economic welfare in emerging economies is a matter of critical concern. If progress does not benefit the citizens of the country, then it is not progress in concrete terms. The aim of this paper is to determine if increased economic freedom leads to improvement in the quality of life. This paper will also examine how the rate of liberalization impacts the quality of life.

The paper will be divided into several sections. Section II talks about the welfare theory of international trade, which is the basis for the hypoth-

eses. Section III will cover theory relating to the existence of a positive causal relationship between economic freedom and economic growth. Section IV will focus on the significance of socio-economic development as a better indicator. Section V will lay out my research design and explain the data sets and the empirical model I will use to test my hypothesis. The results, conclusion, and policy implications will be included in Section VI, VII and VIII respectively.

II. Welfare Theory of International Trade

The Theory of Welfare Economics of International Trade (Murray C. Kemp and Henry Y. Wan, 1993) lays out a proposition asserting the gains from trade for a single free-trading country. This theory establishes the foundation for this paper, that there are gains to be obtained from opening one's economy. The first proposition states: If an initially autarkic or non-trading country abandons all artificial obstacles to international trade, either in a whole set of potentially tradable goods or in some proper subset, and if

"If progress does not benefit the citizens of the country, then it is not progress in concrete terms."

the preferences, technologies and endowments of the trading partners are suitably restricted then there is a scheme of lump sum compensation in the country and an associated competitive

world equilibrium such that no individual in the country is worse off than in autarky. The corollary to the first proposition applies to a group of free-trading countries and is hence more relevant to this paper. It states that if each member of a group of countries abandons autarky and trades freely within the group, and if simultaneously each member of the group eliminates all internal impediments to trade, then there exist schemes of lump sum compensation, one for each

country, and an associated world free trade competitive equilibrium such that no individual, whatever his country of residence, is worse off than in autarky. Expressed in more simplistic terms, it means that abandoning a closed economy system results in individuals being better off or the same as in autarky. It clearly states that there is no reduction in welfare. This theory supports the hypothesis that the greater economic freedom that comes with increased global trade and lifting of barriers will lead to an increase in the welfare of people.

III. Literature on Economic Freedom and Growth

There are several empirical studies (Barro 1996, De Vanssay and Spindler 1994, Pourgerami and Assante 1992, Scully 1988, and Kormendi and Meguire 1985) that have found a significant relationship between economic freedom and economic growth. However, there has been no clear conclusion regarding precedence. Does growth precede freedom or vice versa, or are the two jointly determined?

Jac C. Heckelman's study published in the year 2000 aims to establish a causal relationship between economic freedom and economic growth. He uses economic freedom measures developed by the Heritage Foundation and individual country growth rates. He establishes, using Granger Causality tests as a tool, that a relationship between freedom and growth exists. He also establishes that for the most part, freedom precedes growth. The Heritage Foundation freedom index measures freedom based on the categories of trade policy, taxation, government intervention in the economy, monetary policy, capital flows and foreign investment, banking, wage and price controls, property rights, regulation, and the black market. The findings of this study are very relevant because they support that greater economic freedom leads to greater economic growth.

IV. The Significance of Using Socio-Economic Development

However, economic growth only gives an indication of the benefits of economic freedom. It does not indicate the beneficiaries. This makes us question "the father of economics" - Adam Smith's claim that self-interest and the right to act on it promotes the general welfare of society (Esposto, 1999). The Basic Needs approach to development formulated by Paul Streeten attempts to provide the opportunities for the full physi-

cal, mental, and social development of the human personality and then derives ways of meeting this objective. The emphasis is on ends rather than means and non-material needs are recognized. (First Things First, Meeting Basic Human Needs in Developing Countries, 1981). Thus, mere economic growth rates cannot be a proxy for the quality of life and cannot indicate that basic needs are met. This is explained by Streeten as follows:

- (1) The income or economic growth approach to measuring human progress deals only with the quantity of products but not with the appropriateness of those goods and services.
- (2) Some basic needs can only be satisfied, or more effectively satisfied through public services (education, water, and sanitation), through subsidized goods and services, or through transfer payments.
- (3) Consumers, both poor and rich are not always efficient in optimizing nutrition and health. Additional income can be spent on foods with lower nutritional value leading to a decrease in health.
- (4) The manner in which additional income is earned may affect the quality of life adversely. Compared to others, certain production choices can increase income more but have a greater negative impact on human and environmental well being. One example of this is female employment. Although the mother's income can rise, breastfeeding may reduce, which decreases the nutrition of babies.
- (5) Increased income does not guarantee a reduction in the mal-distribution of wealth within society or households.
- (6) The economic growth approach neglects the importance of non-material needs.

The United Nations Development Program Human Development Report (1999) states that competitive markets may be the best guarantee of efficiency but not necessarily of equity. When the market goes too far in dominating social and political outcomes, the opportunities and rewards of globalization spread unequally and inequitably. The challenge for globalization as determined by the UNDP is to incorporate the following elements:

Ethics: Less violation of human rights, not more.

Equity: Less disparity between nations, not more.

Inclusion: Less marginalization of people and countries, not more.

Human Security: Less instability of societies and less

vulnerability of people, not more.

Sustainability: Less environmental destruction, not more.

Development: Less poverty and deprivation, not more.

V. Research Design

A. Data

I. Index of Economic Freedom

Economic freedom, used as a proxy for globalization, is defined as the absence of government coercion or constraint on the production, distribution, or consumption of goods and services beyond the extent necessary for citizens to protect and maintain liberty itself (Gwartney, 1997).

To measure economic freedom and rate each country, the Heritage Foundation's Freedom Index studies 50 independent economic variables. These variables fall into 10 broad categories, or factors, of economic freedom:

- Trade policy - tariff and non-tariff barriers, corruption in customs.
- Fiscal burden of government - income and corporate taxes, other taxes.
- Government intervention in the economy - government consumption and ownership
- Monetary policy - average and current inflation
- Capital flows and foreign investment - foreign investment code; restrictions on foreign ownership and investment; legal equality between foreign and domestic companies.
- Banking and finance - government ownership and regulation, restrictions on foreign banks.
- Wages and prices controls - minimum wage laws, government price controls, government subsidies that affect prices.
- Property rights - commercial code defining contracts, government expropriation of property, protection of private party, judicial delays and corruption.
- Regulation - licensing requirements, ease of obtaining licenses, environmental consumer, worker regulations, bureaucratic corruption.
- Black market activity - smuggling, size of black market activity.

The Index of Economic Freedom treats the

10 factors as equally important to evaluating the level of economic freedom in any country. It is not possible at the current stage of academic research for the developers of the index to know with a high degree of certainty which factors are more important than others for economic freedom. Each country receives its overall economic freedom score based on the average of the 10 individual factor scores. Each factor is scored according to a grading scale that is unique for that factor. The scales run from 1 to 5: A score of 1 signifies an institutional or consistent set of policies that are most conducive to economic freedom, while a score of 5 signifies a set of policies that are least conducive.

There are four broad categories of economic freedom in the *Index*:

- Free-countries with an average overall score of 1.95 or less;
- Mostly Free-countries with an average overall score of 2.00 to 2.95;
- Mostly Unfree-countries with an average overall score of 3.00 to 3.95; and
- Repressed-countries with an average overall score of 4.00 or higher.

The index for the year 2000 represents data from the year 1999.

II. Human Development Index

For measuring the quality of life, I am inclined towards the Human Development Index published by the United Nations Development Program. The concept of human development is richer and more complex than can be captured in any composite index. The HDI is the most comprehensive index I found that encompasses three vital aspects of socio-economic development. Although it does not capture the effects of environmental damages and marginalization of countries, it is the most wide-ranging indicator available. Since it is published by the UNDP, it is reliable. The HDI is based on three categories (HDR 1998):

- (1) Health, as measured by life expectancy;
- (2) Educational attainment, as measured by a combination of adult literacy (two thirds weight) and the combined gross primary, secondary, and tertiary enrollment ratio (one thirds weight);
- (3) Standard of living and access to resources, as measured by real GDP per capita (PPP\$).

All three are given equal weight in the HDI.

III. GINI Coefficient

Another measure used in this paper is the

GINI Index to establish whether there is a relationship between income inequality and economic freedom. The GINI coefficient is a relative measure of income inequality. The Lorenz curve is a graphical presentation of distribution across various segments

TABLE 1

Index values

No.	Country	Life expty index 1999	Education index 1999	GDP index 1999	HDI index 1999	Freedom Index 1998	Freedom Change 1998-1997
1	Australia	0.9	0.99	0.92	0.936	1.9	0
2	Austria	0.88	0.96	0.92	0.921	2.1	0
3	Bahrain	0.8	0.85	0.82	0.824	1.8	-0.1
4	Brazil	0.71	0.83	0.71	0.75	3.3	-0.15
5	Canada	0.89	0.98	0.93	0.936	2	-0.2
6	China	0.75	0.8	0.6	0.718	3.5	0
7	Denmark	0.85	0.98	0.93	0.921	2.25	0
8	Egypt	0.7	0.62	0.59	0.635	3.4	0.05
9	France	0.89	0.97	0.91	0.924	2.35	-0.05
10	Germany	0.88	0.97	0.91	0.921	2.2	-0.1
11	Ghana	0.53	0.61	0.49	0.542	3.1	-0.1
12	Hong Kong	0.91	0.83	0.9	0.88	1.3	0
13	India	0.63	0.56	0.52	0.571	3.8	0
14	Indonesia	0.68	0.79	0.56	0.677	3.15	0.3
15	Japan	0.93	0.93	0.92	0.928	2.1	0.1
16	South Korea	0.83	0.95	0.84	0.875	2.25	0
17	Kuwait	0.85	0.74	0.86	0.818	2.5	-0.1
18	Malaysia	0.79	0.8	0.74	0.774	2.6	0
19	Mexico	0.79	0.84	0.74	0.79	3.2	-0.1
20	Oman	0.76	0.66	0.82	0.747	2.85	0.15
21	Portugal	0.84	0.93	0.85	0.874	2.3	-0.1
22	Russia	0.69	0.92	0.72	0.775	3.5	0.15
23	Singapore	0.87	0.87	0.89	0.876	1.4	0
24	Spain	0.89	0.97	0.87	0.908	2.4	-0.05
25	Sweden	0.91	0.99	0.9	0.936	2.35	-0.1
26	Switzerland	0.9	0.94	0.94	0.924	1.9	-0.05
27	Thailand	0.75	0.84	0.69	0.757	2.35	0
28	UAE	0.83	0.73	0.87	0.809	2.15	-0.1
29	United Kingdom	0.87	0.99	0.9	0.923	1.8	-0.05
30	United States	0.86	0.98	0.96	0.934	1.8	-0.05
31	Vietnam	0.71	0.84	0.49	0.682	4.1	-0.25

Source: Heritage Foundation, UNDP 1997, 1998, 1999

of the population (on the x axis: cumulative percentages of the population on the x-axis; on the y axis: cumulative proportions of national income or consumption or anything else whose degree of equality is being captured). The GINI coefficient is defined as the summation of the absolute difference between all pairs of incomes (or consumption) divided by the product of population squared and the mean. To simplify, it is found that the closer the Lorenz curve that measures income distribution is to the forty-five degree line, the more equal the distribution of income is said to be. The GINI coefficient measures the ratio of the area between the Lorenz curve and the forty-five degree line to the total area of the triangle. The higher the GINI coefficient, the greater the income inequality.

B. Sample size

Table 1 lists 31 countries, a randomly selected sample of high, middle and low-income countries. I have tried to leave out countries that are suffering due to any external circumstances that are not conducive to trade, such as a war, or a tremendous natural disaster. The sample size is also constrained due to data

availability issues.

VI. Empirical Model

The empirical model will first measure the effect of economic freedom on the quality of life. Using regression, relationships between economic freedom and the HDI will be established. Regressions testing each individual component of the HDI will also be performed. Secondly, the effect of the pace of changes in economic freedom on the quality of life will also be modeled.

The HDI index = Q , representing quality of life

Economic freedom = F

Assuming a simple linear function:

$$(1) Q_t = a + b F_{t-1} + c (F_{t-1} - F_{t-2})$$

The equations for the individual components of the HDI as well as the GINI will be similar to equation 1. Freedom is lagged by one year, since I assume that freedom in one year reflects in the level of quality of life in the next year. Large macro-economic variables like economic freedom need at least a year to reflect changes in any dependent variables.

TABLE 2
Expected signs of variables

Variable	Type	Definition	Expected Sign
Q_t	Dependent	Quality of life in 1999 measured by HDI in 1999	
$LIFE_t$	Dependent	Life Expectancy in 1999 measured by HDI in 1999	
$GDPPPP_t$	Dependent	Real GDP Purchasing Power Parity \$ in 1999 measured by HDI in 1999	
$EDUC_t$	Dependent	Education level in 1999 measured by HDI in 1999	
F_{t-1}	Independent	Freedom Index in 1999	- Since greater values of F mean lower economic freedom, a negative sign means that greater economic freedom is linked to greater quality of life.
$F_{t-1} - F_{t-2}$	Independent	Change in Freedom Index from 1997 to 1998 to measure how the pace of liberalization affects the Quality of life.	- This has the same sign as F_{t-1} .
a	Independent	Constant	+ Since complete freedom will mean high economic freedom, a will be large and positive.

$$(2) \text{ LIFE}_t = a + b F_{t-1} + c (F_{t-1} - F_{t-2})$$

$$(3) \text{ EDUC}_t = a + b F_{t-1} + c (F_{t-1} - F_{t-2})$$

$$(4) \text{ GDPPP}_t = a + b F_{t-1} + c (F_{t-1} - F_{t-2})$$

$$(5) \text{ GINI} = a + b F_{t-1}$$

Equation 1 states that the quality of life in one time-period is determined by the level of economic freedom in the previous time period as well as the change in economic freedom from one time period to the next. Since Q_t includes real GDP per capita PPP\$, it includes the effect of the country's current level of economic growth.

The equations 2, 3, and 4 are used to determine which aspect of human development is most affected by economic freedom and the increase in it. It also separates the effect of Real GDP PPP\$ that is contained in the composite index to determine if life expectancy and education levels are increased by increased economic freedom. This analysis is crucial in measuring all aspects of socio-economic development.

Equation 5 will determine the effect of economic freedom on income inequality; whether economies become more equitable as freedom increases. There are several data constraints involved in measurement of the GINI Index. Data for the GINI index is available for all the countries in the selected sample size with the exception of Bahrain, Hong Kong, Kuwait, Oman, Singapore, and UAE. The data is measured in different years for the countries, spanning a period of 1987 to 1999, with most countries' GINI coefficient being measured in the years 1995-1998.

The interpretation of the coefficient a in the equations is important. Since F is a counter-intuitive index, with high values leading to greater restrictions on economic freedom, a value of zero for F and the change variable will mean that there is complete economic freedom. Hence, a is expected to be positive and large, demonstrating that complete freedom will lead to great improvement in the quality of life.

The coefficient b in all the equations measures the effect of economic freedom in the previous time period on the quality of life in the current time period. Since a lower level of the freedom index signifies greater economic freedom, the coefficient b will have a negative sign when greater economic freedom leads to improved quality of life and a positive sign when it leads to a lower quality of life.

The coefficient c measures the effect of changes in economic freedom on the quality of life.

This coefficient should have the same sign as b .

The interpretation of the coefficients in the GINI Index is a little more complex. GINI, like F is a counter-intuitive measure, with low values signifying greater income equality and higher values representing unequal income distributions. Hence, if increased economic freedom leads to greater income equality, then the coefficient b will be positive. The coefficient a should be positive and as small as possible if perfect freedom means greater income equality.

VII. Results

The results and findings are covered in this section. The results of the correlation between Quality of life in time t and Economic Freedom in time $t-1$ are summarized in Table 3.

The coefficient of -0.759 shows that greater economic freedom and greater quality of life have a positive, direct relationship.

The regression analysis results of Equation 1 are summarized in Table 4.

Regression analysis of Equation 1 shows a high R^2 of 0.625. All the coefficients have the expected signs and F_{t-1} is highly significant in its relationship with quality of life.

$F_{t-1} - F_{t-2}$, the change variable has the correct sign but it is not significant. The coefficient of F_{t-1} indicates that a 1 unit increase in economic freedom produces a 0.126 increase in the quality of life.

The regression analysis is also carried separately for individual components of Q i.e. the Life Expectancy Index, the Education Index and the GDP PPP\$ Index. Those results are presented below in Table 5.

Of these regressions, all the coefficients have the expected sign, although the change variable $F_{t-1} - F_{t-2}$ was not significant. F_{t-1} was found to be significant for each of the equations.

This could be because the change variable was only taken for a span of one year instead of a more extended span.

TABLE 3
Correlation Results

	QT	FT_1
QT Pearson Correlation	1.000	-.759
Sig. (2-tailed)	.	.000
N	31	31

*** Correlation is significant at the 0.01 level (2-tailed).

For Life expectancy, an increase in economic freedom by 1 unit increases the life expectancy index by 0.106.

For Education, an increase in economic freedom by 1 unit increases the education index by 0.094.

For Real GDP PPP\$, an increase in economic freedom by 1 unit increases the real GDP index by 0.176.

Real GDP in terms of PPP\$ has the highest R^2 and is the most highly linked to economic freedom. This is because GDP reflects the level of growth rates and it is already established from the literature review that economic freedom and economic growth have a direct, strong, and causal relationship. Life Expectancy is also significantly related to economic freedom with a high R^2 of 0.620. Education, with an R^2 of 0.317, although significantly affected by economic freedom, is the least affected when compared to Life expectancy and Real GDP PPP\$. Reasons for this could be related to cultural differences as well as the experience of most countries where education is a public good and education policies are regulated by governments. This means that education is not as “free” as other aspects of socio-economic development and hence is not affected that much by an increase in economic freedom.

Regression analysis using the GINI coefficient is fraught with data availability problems. Regression analysis performed taking dummy variables for each of the different measurement years 1987, 1990, 1991-

TABLE 4Results of equation 1. $R^2 = 0.625$

Independent Variable	Coefficient	T-statistic	Significance
a (constant)	1.134	23.108	0.00
F_{t-1}	-0.126	-6.705	0.00
$F_{t-1} - F_{t-2}$	-0.114	-0.918	0.367

1999 was unsuccessful. The reason for this was since the size of the sample data set was small; the dummy variable was picking up the effects of the GINI coefficients of the countries instead of controlling for the different measure-

ment years. The regression was then run using a simple linear equation:

$GINI = a + b F_{1998}$ and a scatter diagram was also plotted.

This equation is modeled on the one used by Berggren in 1998 (Economic Freedom and Equality: Friends or Foes?). Berggren (1998) ran regressions in which income equality is the dependent variable and economic freedom, income levels, and growth are the independent variables. His theory is simple and appealing. He suggests that an increase in economic freedom, *ceteris paribus*, can “induce higher equality, if the poor are able to take advantage of the freer economic setting, perhaps brought about through trade liberalization or the introduction of more secure property rights, to a larger degree than the rich” (p.11).

Although the equation used in this research paper cannot be a precise way of discerning the relationship between economic freedom and income inequality, it is a close enough approximation, given the facts that GINI coefficients do not change radically from year to year and that it has already been established earlier that economic freedom and income levels are highly correlated.

TABLE 5

Regression results for Equations 2, 3, and 4

Dependent Variable	R^2	Independent variables	Coefficient	T-statistic	Significance
LIFE _t	0.620	a	1.070	25.46	0.00
		F_{t-1}	-0.106	-6.624	0.00
		$F_{t-1} - F_{t-2}$	-.0982	-0.928	0.361
EDUC _t	0.317	a	1.093	15.138	0.00
		F_{t-1}	-.09488	-3.441	0.002
		$F_{t-1} - F_{t-2}$	-0.158	-0.864	0.395
GDPPPP _t	0.725	a	1.236	22.828	0.00
		F_{t-1}	-0.176	-8.519	0.00
		$F_{t-1} - F_{t-2}$	-.07468	-0.543	0.591

TABLE 6

Regression results for Equation 5. Dependent Variable GINI

Independent Variable	Coefficient	T-statistic	Significance
a (constant)	21.635	3.211	0.04
F_{1998}	5.489	2.209	0.037

The R^2 for this equation was found to be 0.418, which is reasonably reliable.

The variable F_{1998} is significant and a one unit increase in economic freedom decreases income inequality by 5.489.

The correlation coefficient was found to be significant at the 0.05 level. The scatter diagram in Figure 2 illustrates the relationship between income inequality and economic freedom. There is greater concentration of points where there is low income inequality and low barriers to economic freedom showing that equitable distribution of income and economic freedom are positively and directly related.

Since a is 21.635, it means that even when there is perfect economic freedom, there is still significant income inequality. The size of a is relatively large, suggesting that there is much more to income inequality than what can be explained by economic freedom alone.

The low R^2 and the high value of a could be explained by the theory behind the Kuznets curve. Kuznets (1955) introduced the famous inverted-U shape relationship between inequality and income, shown in the top half of Figure 1, which states that the distribution of income first becomes more unequal as income increases before inequality starts to decrease with income. Several factors have been suggested in order to explain the Kuznets curve. The movement of the labour force from agriculture and rural areas to the more modern urban and industrial sectors implies an increase in incomes for those who move but at the same time a more unequal distribution of total incomes. As more and more people move to urban areas the low paid rural jobs become relatively less important and inequality then decreases. The relevance of this explanation put forward by Kuznets (1955) depends on the levels and changes in the inter sector income differential, inter-sector inequality differential and finally the proportion of the labor force that moves between sectors. The higher dispersion of earnings in many OECD and capital intensive countries is related

FIGURE 1

Scatter Diagram for F_{1998} and GINI

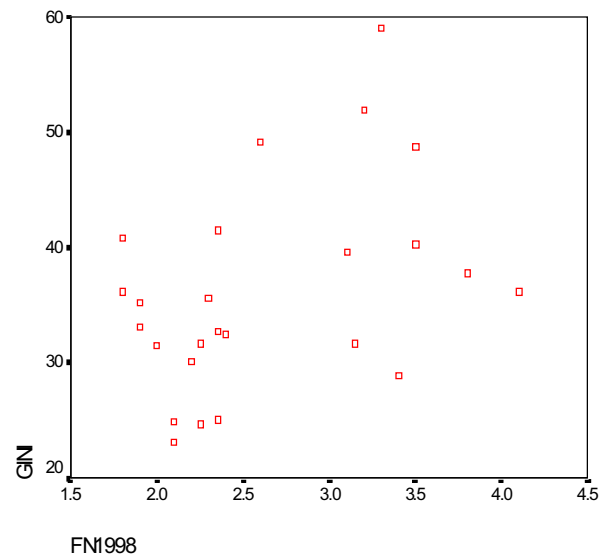
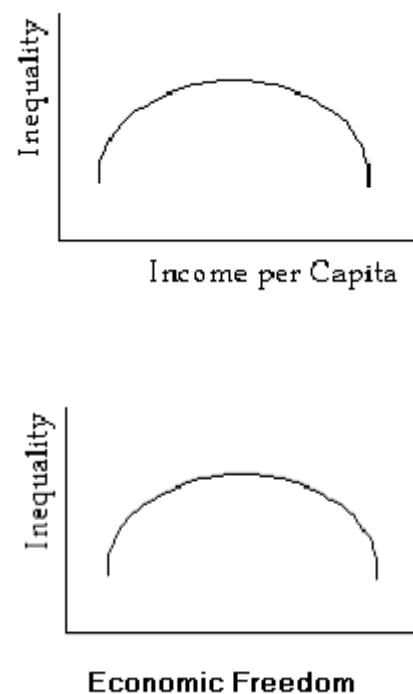


FIGURE 2

Traditional and Modified Kuznet's Curve



to the relatively strong demand for skilled labor (due to capital-skill complementarity) and a more sluggish supply response, while at the same time trade and globalization more generally reduce demand for unskilled workers in these countries.

Since analysis of equation 4 showed that Real GDP per capita increases with increased economic freedom, we could plot some measure of economic freedom on the y-axis instead of income per capita where low values indicate low degree of economic freedom and high values of the measure indicate high degree of economic freedom. The modified Kuznet's curve would then look like the bottom half of Figure 1.

This curve helps explain the weak R^2 and the high value of coefficient α . Even at high levels of economic freedom, where it is already established exist high values of income per capita, there still exist high levels of inequality for some countries. Some countries are at the first part of the Kuznet's curve whereas some that have been free and enjoying a high level of per capita income for a few years are on the declining income inequality part of the curve. This combined effect results in the relatively lower R^2 .

VIII. Conclusion

The empirical results support the hypothesis that increased economic freedom leads to an improvement in the quality of life. The value of the freedom index is significant in all 5 equations. The change variable, measuring the pace of liberalization, supports the predictions made earlier in the paper about faster change having a positive effect on economic freedom. However, it is not statistically significant and hence, cannot be used to draw any policy implications.

To sum up, a 1 unit increase in economic freedom produces a 0.126 increase in the total quality of life as measured by the Human Development Index.

For Life expectancy, an increase in economic freedom by 1 unit increases the life expectancy index by 0.106.

For Education, an increase in economic freedom by 1 unit increases the education index by 0.094.

For Real GDP PPP\$, an increase in economic freedom by 1 unit increases the real GDP index by 0.176.

For the GINI coefficient, a one unit increase in economic freedom decreases income inequality by 5.489.

IX. Policy Implications and Future Research

Most developing countries formulate reform policies that intend to increase economic growth through increased economic freedom. Information about the effects of increased economic freedom on the quality of life will help them make their decision and provide valuable insights on the long-term social effects of globalization. Such information will also indicate the best pace for liberalization for an emerging economy. This paper indicates that greater economic freedom leads to greater socio-economic development and this conclusion has significant policy implications.

Although this paper does not test for causation and precedence, it does indicate that life expectancy, education levels and real GDP PPP\$ are higher at higher levels of economic freedom. This finding appears to be pro-liberalization and pro-international trade. One significant conclusion is that economic freedom is not as highly correlated to income equality as to the other aspects of socio-economic development. This means that deliberate efforts have to be made to reduce income inequality since globalization may or may not bring about an automatic reduction in income inequality. The poor people may take much longer to benefit from the gains of free trade.

This topic also has a lot of potential for further research. The measures of economic freedom are fairly crude and narrow at this stage and need to be developed further. Some aspects of economic freedom are more crucial for socio-economic development than others, and they have to be identified. Researchers can also develop a more wide-ranging measure of socio-economic development than the HDI and come up with either a composite measure or a set of measures that include all aspects of economic growth such as equitable income distribution, environmental well being, and marginalization of countries.

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