Well-Being and Economic Growth: A Case Study of Costa Rican Development

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Introduction

> *"Too much and for too long, we seemed to have surrendered personal excellence and community values in the mere accumulation of material things. Our Gross National Product….counts cigarette advertising and ambulances to clear out our highways of carnage….Yet the gross national product does not allow for the…quality of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country, it measures everything in short, except that which makes life worthwhile." Robert Kennedy, 1968*

Robert Kennedy aptly identified one of the most intriguing challenges of the modern day global order, namely whether collective priorities are aligned to reach a desired state of world equilibrium. Institutions in the global structure have become primary vehicles for policy and agenda-setting as well as conduits for determining cooperative international priorities (Bjornskov, Drener & Fischer, 2010). This immense power held by institutions to set the agenda, once solely a function of the sovereign state, carries with it the responsibility of setting the right agenda, which is more and more being challenged (Schimmel, 2010). Specifically, the focus on economic growth as a fundamental institutional push should be validated against international objectives of peace and stability and the reliability with which that agenda will achieve those aims. The United Nations (UN) has garnered expansive support from its member states for Millennium Development Goals (MDGs) that are inherently economically driven goals. This paper seeks to determine whether the role filled by the UN (as a major international institution) and the MDGs (as targets for what defines progress), are truly well-positioned to facilitate the achievement of advancement toward peace and stability. This exploration is pursued through the application of happiness research, which has demonstrated the mis-alignment of economic growth and happiness to explore the fundamental research question: 'Are we measuring the wrong thing?' And, specifically reviews whether the prevailing MDG

indicators are useful predictors of progress and development. It is considered whether a shift toward focus on self-growth can replace economic growth as the fundamental institutional push and better facilitate achievement of the desired state of equilibrium in the world.

Costa Rica is a Central American state that, while underdeveloped, touts a culture of "Pura Vida," which literally translates as 'Pure Life.' Unsurprisingly, Costa Rica is ranked as the "happiest" country in the world according to both the World Database of Happiness (Veenhoven, 2013) and the Happy Planet Index (Abdallah et al., 2012). Herein, the measure of happiness will be reviewed against the key MDG indicators and subsequently be discussed in terms of how findings apply to predictions for Costa Rica's future well-being vis-à-vis its neighbors in Central America.

Literature Review

Institutional Theory

Two theories are most explicit about dealing with institutions in international relations: neo-institutionalism and neo-liberal institutionalism. Neo-institutionalism is rooted in the sociology tradition and brings forward an understanding of the social constraints that exist in politics and economics and the role institutions play in these contemporary dynamics (Jacobson, 2000; Portes, 2006). Also called "new institutionalism," this theory looks at the context for what some schools assume should be rational human behavior and what constraints lead to "bounded rationality" (Portes, 2006). It follows logically then that institutions, predicated on the bounded rationality of individuals, will also be contextual in their application. Schimmel (2009) argues that the alignment between the United Nations development goals

and what individuals truly want may not be congruent. For example, measurement of economic growth may not predict or drive human behavior to uplift from conditions that have a pervasive effect on their well-being. An alternative driver may be at play—namely the pursuit of happiness.

Neo-liberal institutionalism, rooted in liberalism tradition, assumes absolute gains with the potential for cooperation among states. Neoliberal institutionalists see how both states and actors may contribute to cooperation and even provide institutions with a neutral actor seat at the table to alleviate uncertainty when states enter into agreements (Keohane, 1998). While Keohane (ibid) supports institutions as viable actors, he warns that they, too, must be subject to governance and be held accountable requiring transparency that has thus far not been a consistent practice. This theoretical framework, however, helps to better understand the dynamics of governance as some foresee a shift toward world government (Jacobson, 2000).

Institutions have become increasingly influential in domestic and international affairs, the origins of which are debated as rooted in the Concordat of Worms to the Treaty of Westphalia in the 17th century (Bueno de Mesquita, 2000). Current influence of institutions, however is traced to the development of the United Nations (UN) in 1945 and increased in quantity post-Cold War (Kuperman, 2008). Institutions were brought about to apply governance to global dynamics and provide for a more inclusive world (Murphy, 2005). The aim of most institutions is to serve and represent the world's disadvantaged (ibid). Because institutions influence much of the global politics, economies and social structures, and their reach is so vast, the ideologies to which they subscribe are also espoused in their interactions (ibid).

The United Nations

The United Nations (UN) has become a foremost institution with 192 member states (United Nations, 2013). Leading by primarily Western values (Lotz, 2010), the UN has published Millennium Development Goals (MDGs) to which member states agreed and most participate in gathering and publishing data based upon a set of criteria. The MDGs are representative of cooperation that neoliberal institutionalists would argue is expected in the current global order. MDGs are no small achievement in that they solicit viable movement towards achieving a better world and advocating for less poverty, better health, and increased education, among others, in a demonstrably actionable way. In a very transparent approach, the UN has fostered a cooperative spirit across the world to measure the progress being made to develop in areas that are indicative of evolution of states and their societies. The goals that align with the desired progress are as follows according to MDGs (Millennium Development Goals):

Goal 1: Eradicate extreme poverty and hunger

Goal 2: Achieve universal primary education

Goal 3: Promote gender equality and empower women

Goal 4: Reduce child mortality

Goal 5: Improve maternal health

Goal 6: Combat HIV/AIDS, Malaria and Other Diseases

Goal 7: Ensure Environmental Sustainability

Goal 8: Develop a Global Partnership for Development

Each goal is represented by a measurable indicator. For example, to assess Goal #1 and the aim of reducing poverty and hunger, the proportion of undernourished within a state is measured internationally and report.

All MDG indicators carry with them the implicit assumption that there is economic growth. The value of increasing economic growth is one that, through the UN, has been achieved and accepted by member states by de facto signing off on the indicators to be used. For example, increasing literacy (MDG Goal #2) means that a parent in Myanmar must be able to afford to send their child(ren) to school as well as also sacrifice wages the child(ren) could be earning for non-attendance of school. Or, to increase wages from less than $1 a day to $1.25 a day (MDG Goal #1), jobs must be increased (i.e., investment) and the real minimum wage must be driven up by market forces. To decrease child mortality (MDG Goal #4), women must become educated about pre-natal care and access to healthcare (physically and financially) must increase. For women to become more educated about wellness (MDG Goal #5), both for themselves and their families, there must be an interest in investing in women's growth/rights to reduce gender parity. Many are asking whether governments and institutions are assigning far too high a priority to economic growth in the grand scheme of world progress (Bates, 2004). There has long been the proclivity towards relating income growth with increased well-being and, as such, GDP has been the proxy indicator for a nation's well-being (Clark, 2009).

The influence of institutions has important direct relationships with individual well-being because institutions set agendas and derive how efforts are spent, especially when concerning those who are disadvantaged (Bjornskov, Drener & Fischer, 2010). Institutions can be defined as "rules of the game" (North, 1990). To think about development as a 'game' is crude, but the simplification provides context for how there are rules which are followed to focus attention on the desired course of development (i.e., MDGs). As such, the quality of institutions is a major concern and whether they are steering populations toward a better future, given that they are rooted in specific ideologies, values, and preferences (Duffield, 2007).

Joseph Stiglitz, an economist awarded the Nobel prize said it well: "What you measure affects what you do. If you don't measure the right thing, you don't do the right thing" (Forgeard et al., 2011). Institutions set the policy agenda and set it to hopefully achieve progress. Defining what "progress" means is therefore key to obtaining the objective of greater welfare of nations. Of the values that remain at the forefront is the focus on economic growth as a primary institutions push (Easterlin, 1974). However, scholars are questioning if those values are misaligned with the true aims of global progress (Booroah, 2006). In public policy concerns, most everyone would claim to be interested in human well-being (Bates, 2004). If this is the case, why is there far less dialogue about what truly constitutes well-being rather than accepting economic growth as the primary institutional driver?

International institutions are defined as "relatively stable sets of related constitutive, regulative, and procedural norms and rules that pertain to the international system, the actors in the system (including states as well as nonstate entities), and their activities" (Duffield, 2007). The origin of institutions had roots in the Latin America-United States relations of the early 1940s and the Bretton Woods conference of 1944 (Helleiner, 2009). The intent of institutions held its wisdom in the original conceptualization that they were to help poorer countries to keep up economically and avoid having to rely on richer countries in the long term (ibid). Institutions are in place today to provide guardrails or boundaries to facilitate a common understanding and are purposed for providing support to those who need it. Whether institutions are successful in those aims is entirely different altogether. For example, institutions such as North Atlantic Treaty Organization (NATO), United Nations (UN), and World Health Organization (WHO) are Western-dominated and thus pursue their activities according to the Western perspective. Participation in these organizations has been an

effective means of protecting self-interests of states with common values. Murphy (2005) suggests that in certain circumstances, institutions that are intended to help instead further marginalize disadvantaged and effectively contradict the well-meaning principles of institutions.

Institutions have been the catalyst for much of the current "mutual-aid society" structure (Ikenberry, 2011) and have provided a framework for collective action. To the extent that institutions have led to an erosion of sovereignty, however, theorists are quick to reiterate that sovereignty is not a thing of the past (Nye, 2004) and that institutions, instead, are responsible to national governments being used as tools to coordinate interdependencies and reinforce norms of engagement.

The United Nations (UN) fundamentally represents its greatest strength—the intent for global peace through human security. Human security comes about in different ways such as through international laws (Golub, 2007), pervasiveness of international norms that highlight the importance of human rights (Lotz, 2010), development through state-building (ibid), common international goals (Jolly, 2004), peacekeeping (Lotz, 2010), and a general increase in human well-being (Schimmel, 2009). Schimmel posits simply that humans "are the primary end as well as the principle means of development," (ibid). The UNs strength is in its ability to attract the cooperation of its 190+ members, foster agreement towards common aims and mobilize jointly to achieving those objectives for the good of human kind (Jolly, 2004). And, it is no small undertaking. For the UN to garner the support of such a collective is by far its greatest accomplishment. That collective is a means by which international norms are dispersed so that no matter the country, they are all at least on some level playing field about what actually constitutes right or wrong or just or unjust (Lotz, 2010). Without those

international norms everyone would be starting out of a different gate moving towards different aims and what actually defines global 'peace.' Of the UNs collectively agreed upon goals, many have been met (e.g., the eradication of smallpox) and many more have yielded positive, measurable progress (Jolly, 2004). However, there is evidence of the misalignment with how the UN defines well-being and measures it in terms of an elitist perspective of education and wealth, wherein the individual may not define well-being the same way (Schimmel, 2009).

Happiness Research

Whereas the focus was once happiness in the afterlife, per the promise of major world religions, there has been an observable shift to the desire for earthly happiness (McCloskey, 2012). In the United States (arguably where institutions gained their formal footing), the constitution guarantees "life, liberty, and the pursuit of happiness" and many more thought-leaders including John Locke and Comte de Mirabeau held happiness as the aim of life (ibid). Herein, happiness is used interchangeably with "subjective well-being" and "life satisfaction." Personal well-being and 'happiness' has long been a study of sociologists and psychologists (Myers, 1992). Increasingly, however, happiness is being reviewed against the political and economic landscapes in review of institutional goals and objectives (Schimmel, 2009).

The Easterlin Paradox is a phenomenon that launched scholarly inquiry into the relationship between economic development and happiness. Named for the economist, Richard Easterlin, the Paradox gave light to the widely held belief that economic growth was unquestionably a good thing (Easterlin, 1974). Easterlin expresses how one might expect, based on where emphasis in policy and in society has been placed, that greater happiness would result from increases in income. However, in developed countries, the contrary effect has been

found wherein increased incomes have leant to slight decreases in happiness over time (Easterlin et al., 2010). The paradox is that, in general, the more people earn, the less happy they are. In recent history, for example, China has witnessed remarkable economic growth and yet their happiness index is consistent with the Easterlin paradox (Knight & Gunatilaka, 2011).

An abundant literature has been developing to better understand contributions to happiness. Happiness is defined as "the degree to which an individual judges the overall quality of his life-as-a-whole favorably" (Schimmel, 2009). All major world religions entreat their worshipers to seek happiness found in walking a divine path while in this world (Husain, 2003). A review of relevant literature exploring the relationship between happiness and economic growth, as well as other factors that impact happiness, provide insight into the complexities of predicting happiness as evidenced in the causality diagram below (Figure 1). Those relationships marked with an asterisk in the diagram are measured within the present research. Ceteris paribus, there has been found no significant trend in relationship between income growth and happiness (Schnittker, 2008).

Varying determinants of happiness can be categorized as internal and external drivers. Internal drivers may include self-esteem, nurturing, or maternal affection (Rojas, 2007). External factors, the focus of this research, range from the effects of good governance, wherein better government lends to increased happiness (Helliwell & Huang, 2008) to marital status, such that married people report greater happiness (Schnittker, 2008). In a longitudinal analysis using data spanning from 1973 to 2004, Schnittker (2008) concluded there is no overall trend in income growth and happiness. The relationship between economic growth and happiness has been found to be bi-directional such that happier people earn more or that lower income people may be less happy mediated by absolute or relative income (Graham & Pettinato, 2002).

Thus, the relationship between income and happiness is not significant if one's basic human needs are not being met (i.e., relative deprivation). A very poor person, for example, who has no access to water or food will recognize greater happiness when money can buy those human necessities. Those who have the ability to achieve basic needs find declining marginal utility of income when pertaining to happiness (Schnittker, 2008). Research finds that economic freedom influences the happiness of developing countries, whereas political well-being contributes to personal well-being in richer countries (Hudson, 2006).
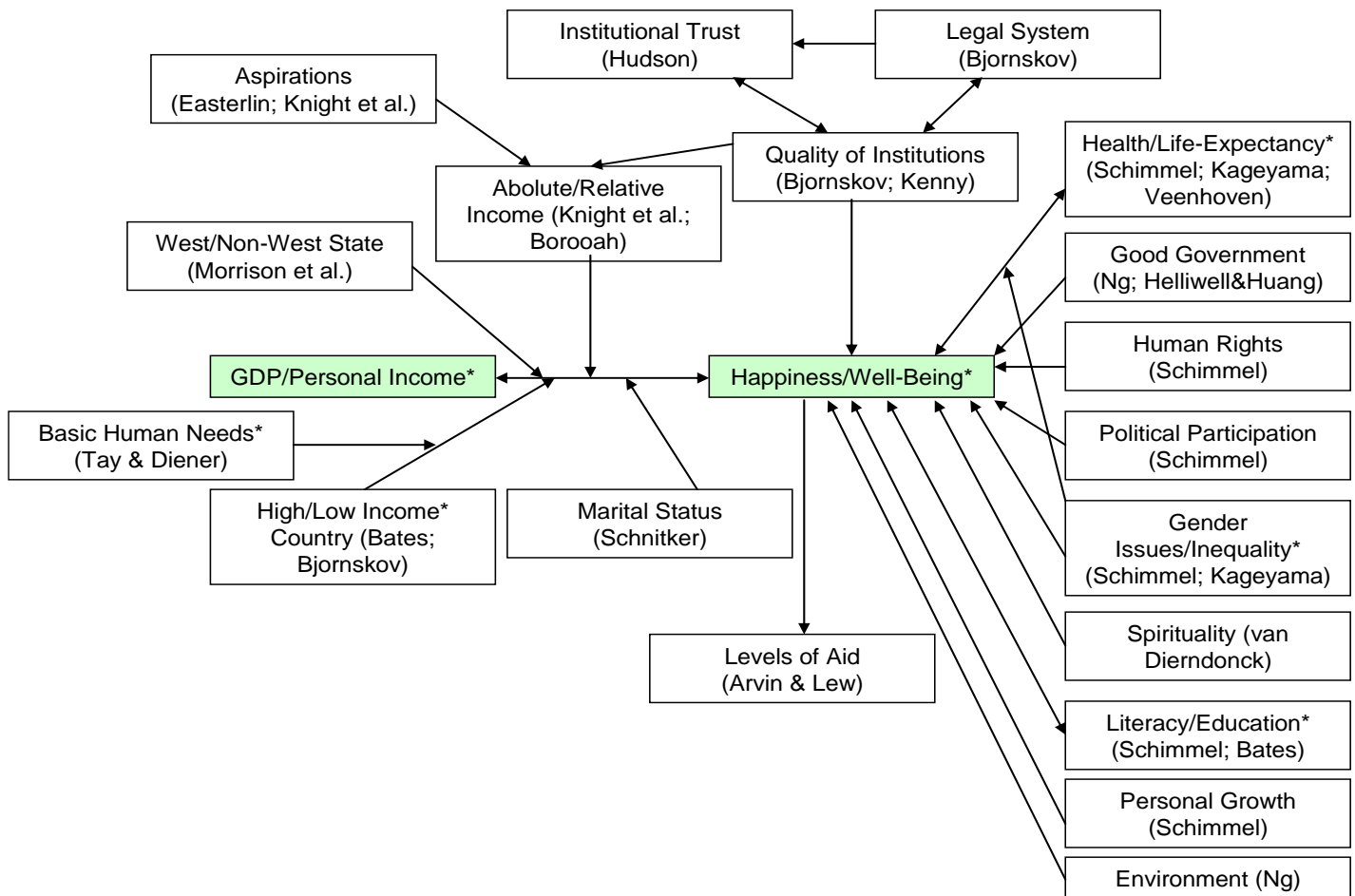

Figure 1. Happiness Research Identified Variable Relationships

The trap the world has found itself in is the institutionalized notion of what "happiness" means. For example, a woman in India who has experienced gender oppression and lives in poverty may lead a "miserable" existence. Positive changes to that oppressive life may make her more content. But, objectively, one might not assess that she could possibly be happy since she maintained her poverty status (Griffin, 2007). Veenhoven (in Rojas, 2007) argues that people can achieve a state of happiness even under apparent hardship. Institutions have socialized that happiness means a trouble-free life, but the true paradox, Veenhoven argues, is found in the over-estimation of hardship. While Budda observed that life is suffering and Jesus was crucified before he was resurrected, somewhere along the line, it became institutionalized that attainment of ultimate happiness is found in material wealth. Bjornskov, Drener & Fischer (2010) found that the quality of institutions is a significant predictor of happiness, thus reinforcing the impact of institutions as drivers of global aims.

Economics should take heed to literature on happiness as an input to understanding drivers of economic volatility in the 21st century (Bjornskov, Drener & Fischer, 2010). For example, across Europe today, such as in Greece and Spain, cultures that are traditionally observed to be developed, upwardly mobile, and culturally relaxed have become violent, promoters of heterogeneity, and face civil unrest. Addressing what fundamentally can increase the happiness of those populations may unveil new approaches to right-sizing the economic conditions. Institutions may benefit from incorporating happiness policies to predict (through indicators) and promote (through policies) that which can shift an economy efficiently and effectively.

Economists may also learn from the finding that personal aspirations may reduce happiness and explain the declining marginal utility of income (Rojas, 2007). For example,

one who buys a large expensive home ("conspicuous consumption trap") may have lower life satisfaction than one who has more time to vacation or spend time with friends and family ("non-conspicuous" goods). This would be an indicator that earnings may be less important than quality of life and output can remain the same or increase if the emphasis shifts to personal well-being rather than economic well-being. The over-production of conspicuous consumption good and under-production of non-conspicuous goods can lead to market failure (i.e., the housing market crash). Because money does afford basic human needs and it is a major societal objective, it is expected to have some impact on well-being (Diener, Ng & Arora, 2010), therefore it is not the contention here that there is no relationship at all between economics and happiness. Instead, this research seeks to contribute to shifting toward a more holistic model of how to best achieve international institutional aims.

Criticisms of measuring happiness

Certainly, criticisms of happiness research have arisen as a result of the subjective nature of appraisals of well-being as well as questions around the interpretation of happiness cross-culturally (Ng, 2008). It is valuable to address them up front. Happiness can be argued to be a subjective measure and, it is, which reveals the entire premise of the happiness inquiry: how people feel impacts how they participate in the world. Therefore, ignoring the subjective perspective of happiness to benefit the attempt of objective scientific inquiry, is to ignore one real perception that every human being in the world has. Happiness can be identified as one of the few aims that almost everyone in the world shares and in response, a large body of scholarly research has developed and numerous advances have been made in the measurement of well-being (Forgeard et al., 2011). Another criticism is in how different happiness can be

defined. Research has found that the effect of differences on the definition of happiness is not significant (Bjornskov, Drener & Fischer, 2010). Removing cultural biases from happiness research, there has been no substantive finding that there are cultural differences in the interpretation of happiness (Kenny, 1999). Also, in a cross-national study of happiness across India, Japan, China, and Canada, no differences were found for what constitutes subjective well-being (Taforodi et al., 2012). Richard Layar argues that "we know that happiness is an objective phenomenon, and that it can be the basis for discussing what we want to do with our social policy and our personal lives" (Easton, 2006).

Methodology

Applying a quantitative method, data sources included the United Nations Millennium Development Goals database, a public database published by the United Nations, and the World Database of Happiness (Veenhoven, 2013). The countries selected for analyses were limited to those available in the World Database of Happiness (n=176) and are listed in Appendix A. Data from both databases were matched based on country and selected for the year 2006 or 2007 based upon the most recent availability of data collected. MDG goals have multiple indicators for each goal category, thus only one indicator was chosen per goal. The indicators selected were based on most complete data sets as follows:

MDG Goal	Indicator Included in Analysis
Goal 1: Eradicate extreme poverty and hunger	Proportion of undernourished
Goal 2: Achieve universal primary education	Net enrollment ratio in primary education
Goal 3: Promote gender equality and empower women	Ratio of girls to boys in education, gender parity index
Goal 4: Reduce child mortality	Under five mortality rate
Goal 5: Improve maternal health\	Maternal mortality ratio
Goal 6: Combat HIV/AIDS, Malaria and Other Diseases	HIV prevalence ages 15-49

Goal 7: Ensure Environmental Sustainability	CO2 emissions per capita
Goal 8: Develop a Global Partnership for Development	Mobile cellular subscriptions per 100 people

Table 1. Chosen MDG Indicators Used for Each Goal

In addition to goal indicators, Gross Domestic Product per capita was included as a variable. From the World Database of Happiness, the aggregated "Satisfaction with Life Index" variable was used. One dummy coded variable was created for whether or not a country was considered 'developed' based on UN country classifications of developing country status. This variable was included to assess whether there are differences in happiness based on being in a developed state (Morrison et al., 2011). Hypotheses are as follows:

H_1: Happiness scores are significantly correlated with MDG indicators

H_2: Happiness is predictive of Gross Domestic Product per capita

H_3: Gross Domestic Product per capita is predictive of happiness

Results

To evaluate Hypothesis 1, correlations were calculated for all variables (Table 2). The results of the analysis provide no surprises in relationships, validating the viability of the data. Specifically pertaining to life satisfaction, all relationships were significant except for Global Partnership (MDG 8), as represented by the mobile phone indicator, for which no known relationships exist. Relationships fell as follows: The more developed the country, the greater the life satisfaction (r=.3020, p<.001); the greater the GDP per capita, the higher the satisfaction (r=.541, p<.001); the more undernourished the population, the lower the satisfaction (r=-.4145, p<.001); the greater the number of those in primary education, the higher the satisfaction (r=.4344, p<.001); the more number of girls in education, the higher the satisfaction (r=.4318, p<.001); the higher the levels of child mortality, the lower the satisfaction (r=-.5623, p<.001); the higher the levels of maternal mortality, the lower the satisfaction (r=-

.5235, p<.001); and, the greater the number of CO2 emissions, the greater the satisfaction (r=.3754, p<.001). The relationship between CO2 and happiness can best be explained through GDP per capita in that greater CO2 emissions are more likely to be in developed, more technologically advanced countries. These significant correlations across almost all MDG indicators, developed country status and GDP per capita, demonstrates that happiness, or the life satisfaction index, is a viable proxy indicator for all that is being measured to point towards progress.

	Life Satisfaction	Develop/ Undevelop	GDP Per Capita	Under-Nourished	Primary Education	Gender Parity	Child Mortality	Maternal Mortality	HIV Prevalence	CO2 Emissions	Mobile Phone
Life Satisfaction	--										
Develop/ Undevelop	0.3020*	--									
GDP Per Capita	0.5410*	0.6346*	--								
Under-Nourished	-0.4146*	-0.3490*	-0.3777*	--							
Primary Education	0.4344*	0.3268*	0.3496*	-0.4674*	--						
Gender Parity	0.4318*	0.1415	0.2080*	-0.5262*	0.5949*	--					
Child Mortality	-0.5623*	-0.4170*	-0.4617*	0.6383*	-0.7516*	-0.6902*	--				
Maternal Mortality	-0.5235*	-0.3762*	-0.4186*	0.6505*	-0.6621*	-0.6443*	0.9174*	--			
HIV Prevalence	-0.3155*	-0.2206	-0.2011	0.2853*	-0.1971	0.0445	0.3886*	0.4320*	--		
CO2 Emissions	0.3754*	0.3584*	0.6619*	-0.4408*	0.3088*	0.2951*	-0.4295*	-0.4196*	-0.1688	--	
Mobile Phone	0.0494	0.1156	0.0747	-0.1322	0.1641	0.0399	-0.1406	-0.1411	-0.1149	0.0997	--

Table 2. Correlations Among Variables (*p<.001)

Regression analyses were used to evaluate Hypotheses 2 and 3, first testing the full model using happiness as the dependent variable, then testing the full model using GDP per capita as the dependent variable (Table 3 & Table 4). In the former analysis, 44% of the variability in happiness is explained (F=8.07, p<.001). In the latter analysis, 68% of the variability in GDP is explained (F=19.33, p<.001). In both models, the most significant individual predictors are respectively GDP per capita and happiness. While the latter model holds greater explanatory power, it is worthwhile to note that there is a relationship between happiness and GDP that is not mediated by whether or not a country is developed. Support for both hypotheses again reinforces the viability of happiness as a useful indicator that is not country-specific.

Source	SS	df	MS	
Model	69265.824	10	6926.5824	Number of obs = 89
Residual	66982.1285	78	858.745237	F(10, 78) = 8.07
Total	136247.952	88	1548.27219	Prob > F = 0.0000
				R-squared = 0.5084
				Adj R-squared = 0.4454
				Root MSE = 29.304

Variable	Coefficient	SE	t	P>|t|
Developed/Not-Developed	-.1056243	10.88356	-0.01	0.992
GDP Per Capita	.0010975	.0002404	4.57	0.000
Undernourished	-.0906697	.3708845	-0.24	0.808
PrimEd	.3303546	.3785068	0.87	0.385
Gender Parity	106.2583	39.13268	2.72	0.008
Child Mortality	.0914356	.2230076	0.41	0.683
Maternal Mortality	.005434	.0383745	0.14	0.888
HIV Prevalence	-1.254517	.8132352	-1.54	0.127
CO2	-1.04286	1.133994	-0.92	0.361
Mobile Phones	1.79e-09	9.07e-08	0.02	0.984
_cons	54.92708	54.74468	1.00	0.319

Table 3. Regression Analysis--Dependent Variable: Life Satisfaction Index

Source	SS	df	MS	
Model	2.9067e+10	10	2.9067e+09	Number of obs = 89
Residual	1.1728e+10	78	150359620	F(10, 78) = 19.33
Total	4.0795e+10	88	463583694	Prob > F = 0.0000
				R-squared = 0.7125
				Adj R-squared = 0.6757
				Root MSE = 12262

Variable	Coefficient	SE	t	P>|t|
Life Satisfaction Index	192.1706	42.08701	4.57	0.000
Developed/Not-Developed	15291.01	4212.173	3.63	0.001
Undernourished	5.277192	155.2513	0.03	0.973
Primary Education	-20.37329	159.1372	-0.13	0.898
Gender Parity	-22264.61	16944.63	-1.31	0.193
Child Mortality	-49.8935	93.24487	-0.54	0.594
Maternal Mortality	5.783865	16.04614	0.36	0.719
HIV Prevalence	186.2913	344.7977	0.54	0.591
CO2	1810.258	430.7978	4.20	0.000
Mobile Phones	-.0000488	.0000375	-1.30	0.197
_cons	-11515.39	23017.83	-0.50	0.618

Table 4. Regression Analysis-- Dependent Variable: Gross Domestic Product Per Capita

Due to the above findings and support for hypotheses, individual regressions were run using life satisfaction and GDP per capita as the independent variables on each of the MDG indicators as dependent variables to tease apart the effects of the individual indicators (Table 5).

Dependent Variable	Independent Variable	Coefficient	SE	t	P>|t|	R^2	F	Prob > F
Undernourished	Life Satisfaction	-.0927322	.0269018	-3.45	0.001	0.2020	20.24	0.0000
	GDP Per Capita	-.0001454	.0000568	-2.56	0.011			
Primary Education	Life Satisfaction	.1192029	.0344854	3.46	0.001	0.2035	14.95	0.0000
	GDP Per Capita	.0000948	.0000643	1.47	0.143			
Gender Parity	Life Satisfaction	.0018218	.0003838	4.75	0.000	0.1893	14.60	0.0000
	GDP Per Capita	-4.97e-07	7.45e-07	-0.67	0.506			
Child Mortality	Life Satisfaction	-.557693	.0942944	-5.91	0.000	0.3468	45.40	0.0000
	GDP Per Capita	-.000613	.0001982	-3.09	0.002			
Maternal Mortality	Life Satisfaction	-2.613756	.5113153	-5.11	0.000	0.2868	33.58	0.0000
	GDP Per Capita	-.0026919	.0010579	-2.54	0.012			
HIV	Life Satisfaction	-.0370923	.0116924	-3.17	0.002	0.1057	8.15	0.0005
	GDP Per Capita	-5.66e-06	.0000234	-0.24	0.810			
CO2	Life Satisfaction	.0039518	.0124117	0.32	0.751	0.4384	66.76	0.0000
	GDP Per Capita	.0002472	.0000259	9.55	0.000			
Mobile Phones	Life Satisfaction	11508.34	107041.4	0.11	0.915	0.0057	0.48	0.6178
	GDP Per Capita	171.5043	224.0139	0.77	0.445			

Table 5. Regression Analysis—MDG Indicators on Life Satisfaction and GDP per capita

In these regressions, life satisfaction is always the stronger predictor when compared to GDP per capita, with the exception of CO_2 and mobile phones per capita, which are fundamentally functions of increased technology brought about by development. Such a finding can be an important one for policy in terms of where to place funding priorities. For example, if policy places emphasis on education as a primary driver of progress, increased GDP per capita is not the way it is achieved relying on this data. Life satisfaction is as good or a better focus for measurement than gross domestic product per capita. Life satisfaction is not only significantly correlated with GDP per capita, but also is a predictor of it. Happiness, therefore, could serve as a viable proxy for GDP and other indicators and its strength in analysis reveals its importance in institutional discourse.

Costa Rica—The Happiest Country in the World

In line with the afore-reviewed analyses on the viability of happiness ranking as a proxy for GDP per capita pertaining to development goals, it is worthwhile to consider the happy country of Costa Rica against these findings. According to the Happy Planet Index (Abdallah et al., 2012), a composite score of experienced well-being, life expectancy, and ecological footprint per capita, Costa Rica ranks the highest in the world for happiness. As one might expect of a happy populace, less than 5% of Costa Ricans are undernourished, 103% are enrolled in primary school (exceeds 100% due to counts of over-aged and under-aged students also enrolled), gender parity is 1.06 (more girls are in school than boys), child mortality is 10 per 1,000 births (or, .01%), maternal mortality is 38 per 100,000 live births (or, .0004%), HIV prevalence is .3%, CO_2 emissions are low at 1.7 metric tons per capita, and mobile cellular subscriptions are at a high 144 per 100 people (World Bank, 2015). All in all, these indicators

are quite positive. In fact, they would suggest a quality of life ironically not shared by many developed countries (i.e., the United States).

In alignment with the Easterlin Paradox, Costa Rica's per capita income is $9750, which is still lower than the average world per capita income of $10,850 albeit higher than all other Central American companies with the exception of Panama in absolute dollars (World Bank, 2015). What stands Costa Rica apart from its neighbors, however, is that there has been no civil unrest or military within its borders since 1949. This compelled an analysis over time of key indicators compared to other Central American countries, not in absolute values, but in percentage change, since Costa Rica started out with better institutions.

	2012	1960-2014	1995-2013	1967-2013	1967-2014
Country	Happiness Rank	% Change Population	% Change Healthcare Spend Per Capita	Child Mortality <5 years per 100	% Change GNI Per Capita
Belize	4	72.90	106.31	-84.61	92.68
Costa Rica	1	72.98	358.19	-88.31	96.19
Guatemala	10	73.89	277.10	-83.63	92.22
Honduras	13	75.76	419.62	-86.46	91.51
Nicaragua	8	71.24	168.94	-87.27	92.00
Panama	7	71.06	259.57	-76.13	95.70
El Salvador	5	56.56	152.09	-90.39	100.00
World	n/a	57.87	125.66	-73.29	95.28

Table 6. Central America Percent Change on Key Indicators

In Table 6 above, it is observed that Central America holds 7 of the top 15 happiness rankings. In addition, most states have observed an over 70% population growth since 2006 with the exception of El Salvador. Interestingly, El Salvador has a slower growing population (57% since 2006), has increased its healthcare spend minimally compared to the other states, is the regional leader in reducing child mortality, and has increased the GNI per capita the most. Costa Rica, on the other hand, saw a significant jump in the healthcare spend per capita (358%) but lies fairly consistently among the states for the remaining indicators.

One interpretation of why Costa Rica ranks the highest, despite that El Salvador appears to have made the greatest strides, is that the happiness ranking is flawed in that it takes into account life expectancy. Certainly, the more a population ages, the more expensive their healthcare, thus including life expectancy as an index component, may influence the overall scores unnecessarily. On the other hand, for the most part, there is very little variability among the development indicators across Central America. In addition, all countries rank high in happiness despite their low net per capita incomes, supporting the Easterlin Paradox and Veenhoven's over-estimation of hardship. In this review of Costa Rica and Central America, it appears that the above findings are supported and that, indeed, well-being can be a valuable input to understanding development.

Discussion

In sum, happiness is herein demonstrated to be a viable predictor for many indicators that have been determined to be institutional metrics for progress. Adding a focus on well-being into policy and agendas could be impactful for inexpensive and sustainable forward movement. Additionally, because of cultural aversions to Western focus on materialism, well-being may be a good foreign policy shift for achieving even greater international cooperation across civilizations (Huntington, 1993). In 1916, Mahatma Gandhi, leader in attaining India's peaceful freedom from England, gave a speech in which he accepted "the promotion of happiness as the test of social policy" and openly protested the Western notions of happiness pertaining to physical prosperity to which many formal institutions subscribe (Rivett, 2004).

Overall, both poverty and affluence are detrimental to well-being (Stilwell & Jordan, 2007). Moving out of poverty is a good institutional goal and should remain such for the United Nations. However, infinite economic growth should be tempered by a focus on

increasing social well-being. Inequality in society is a distraction from well-being and, though re-distribution of wealth is not recommended here, attention to institutional focus is.

It may perhaps be over-zealous to suggest redefining political and institutional purpose altogether, but incorporating well-being into institutional agendas is not only reasonable, but may serve the added value of mitigating civilizational dissent with a demonstrable shift to focus on the human rather than material growth. Tony Blair, former British Prime Minister said "Money isn't everything. In the past, governments have seemed to forget this. Success has been measured by economic growth alone. Delivering the best possible quality of life depends on deriving ways of assessing how we are doing" (Easton, 2006). Institutions should begin to promote happiness as part of their policies (Veenhoven, 2008) and to include measures of well-being among global indicators, such as in the set of Unites Nations development goals.

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Appendix A-List of Inclusion Countries

Albania
Algeria
Angola
Antigua and Barbuda
Argentina
Armenia
Australia
Austria
Azerbaijan
Bahamas, The
Bahrain
Bangladesh
Barbados
Belarus
Belgium
Belize
Benin
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Bulgaria
Burkina Faso
Myanmar
Burundi
Cambodia
Cameroon
Canada
Cape Verde
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo, Dem. Rep.
Congo, Rep.
Costa Rica
Croatia
Cuba
Cyprus
Czech Republic
Denmark

Djibouti
Dominica
Dominican Republic
Ecuador
Egypt, Arab Rep.
El Salvador
Equatorial Guinea
Eritrea
Estonia
Ethiopia
Finland
Fiji
France
Gabon
Gambia, The
Georgia
Germany
Ghana
Greece
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
Hong Kong SAR, China
Hungary
Iceland
India
Indonesia
Iran, Islamic Rep.
Ireland
Israel
Italy
Ivory Coast
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Kyrgyz Republic
Lao PDR
Latvia

Lebanon
Lesotho
Libya
Lithuania
Luxembourg
Macedonia, FYR
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Mauritania
Mauritius
Mexico
Moldova
Mongolia
Morocco
Mozambique
Namibia
Nepal
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Oman
Pakistan

Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Romania
Russian Federation
Rwanda
Samoa
Sao Tome and Principe
Saudi Arabia
Senegal

Seychelles
Sierra Leone
Singapore
Slovak Republic
Slovenia
Solomon Islands
South Africa
Spain
Sri Lanka
St. Kitts and Nevis
St. Lucia
St. Vincent and the
Grenadines
Sudan
Suriname
Swaziland
Sweden
Switzerland
Syrian Arab Republic
Tajikistan
Tanzania
Thailand
Timor-Leste
Togo
Tonga
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
United Arab Emirates
Uganda
Ukraine
United Kingdom
Uruguay
United States
Uzbekistan
Vanuatu
Venezuela
Vietnam
Yemen
Zambia
Zimbabwe