A Global Examination of the Relationship Between Corruption and Well-Being and Happiness

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Abstract: *Well-being and happiness are without question important to governmental leaders, policy makers, and citizens throughout the world. It would thus be expected that all of them would want to work tirelessly to create systems and processes through public policy and other activities that would promote well-being and happiness. But despite attempts across the globe to achieve this outcome, there is a great deal of evidence of the existence of a number of obstacles to reaching it. This paper focuses on one of the major obstacles by examining the relationship between corruption and factors suggested in the literature as being indicative of both individual and national well-being and happiness. While for many years, well-being and happiness has been closely linked to factors that are economic in nature, this study also identifies and includes additional political and social factors as found in more recent literature on democracy and good governance. Specifically, these factors include various indicators of democracy, educational indicators, and indicators associated with physical health. The underlying question addressed in this study is how closely perceived levels of corruption are related to a variety of political, economic, and social factors as observed through several indexes used to measure well-being and happiness. The importance of the research is that it provides a global examination of the relationship between corruption and these factors using current data and justifies future research into the nature of that relationship and its implications for addressing corruption in the future in order to increase opportunity for increased well-being and happiness among a large proportion of the world's population who do not enjoy it at the present time.*

Key Words: Corruption, Well-Being, Happiness

Introduction

Scholars have for many years studied the effect of the quality of governance on a sense of well-being and happiness. Despite this, empirical evidence on the relationship between well-being and happiness and corruption is barely perceptible in the literature. Much of the limited literature that does exist indicates that corruption reduces that sense among governmental leaders, policy makers, and citizens alike. The term good governance was widely adopted after the publication of The World Bank's Development Report in which the role of the state was described as being that of a partner, catalyst, and facilitator (World Bank, 1997). The report asserted that an effective state, in contrast to a minimalist one, is essential for the adequate provision of the goods and services, as well as rules and institutions, that will allow markets to flourish and people to lead healthier and happier lives. Further, the concept of good governance was described as being an actual need for governments, not a luxury but a vital necessity, without which there can be no economic or social development (World Bank, 1997).

Intuitively, corruption, which has no geographical boundaries and exists everywhere, should rank high among the list of variables which may affect well-being and happiness since it is known to affect governance in many ways. However, in light of the number of studies conducted over the last fifty years found among the literature on corruption that have debated whether it impedes growth and general welfare, there is an obvious lack of studies linking corruption to well-being and happiness. In fact, there are no models of happiness with corruption as a main argument in its production. The central aim of this study is to examine the relationship between corruption and well-being and happiness using data obtained on more than 160 countries worldwide. Data represent measures on a variety of political, economic, and social variables, all of which have been used in studies that have examined levels of well-being and happiness both at the national and individual levels in countries throughout the world (Arvin & Lew, 2014).

Literature Review

One single point of general consensus that has emerged from the literature of well-being and happiness in more recent studies is that the quality of governance is a positive correlate in the minds of citizens (Helliwell, 2003; Helliwell & Huang, 2008; Veenhoven, 2010). Specifically, Helliwell (2003) found that individuals who were the happiest lived in countries with political institutions that could be described as effective with high levels of mutual trust and low corruption. Veenhoven (2010) also found that people in countries whose governments were more effective reported higher levels of happiness. Anderson and Tverdova (2003) found that the level of corruption in a country is arguably among the most widely used measures of government effectiveness and performance. This supports a reasonable conclusion that it must be the case that personal well-being and happiness are associated with corruption. Further, it can also be argued that corruption likely has a negative influence on happiness everywhere, although different cultures have different levels of acceptance of corruption (Veenhoven, 2010).

In order to begin to unravel the complexities surrounding the relationship between corruption and well-being and happiness, it is first necessary to discuss what is meant by the concepts of well-being and happiness as they are not necessarily reflective of the same thing depending on who defines them. Although the concept of well-being is widely used, there is no commonly agreed upon definition of just what it is. Furthermore, the terms well-being, quality of life, happiness, and life satisfaction are often used in the literature interchangeably. In general, definitions of well-being fall into three categories. The first includes very general or global definitions that provide little to no detail of what factors are included in them. The second category of definitions includes definitions of the factors that comprise well-being so as to break it down into its constituent parts. Finally, the last category consists of focused definitions that either explicitly or implicitly refer to just one or a few factors comprising well-being (OECD, 2013).

OECD (2013), in the face of having no single definition for well-being, argues that most would agree that it describes a condition in which various human needs are met, some of which would considered as being essential, e.g., having good health. It should also go further to include the ability to pursue one's goals and to thrive and feel satisfied with one's life. OECD (2013) also argues that since well-being is a complex phenomenon and many of its determinants are strongly correlated with each other, assessing well-being requires a comprehensive framework that includes a large number of components and that, ideally, allows gauging how their interrelations shape people's lives. Reflecting

this multi-dimensional approach, the OECD (2015) identifies three pillars for understanding and measuring people's well-being as delineated in Table 1.

OECD (2015) likens material living conditions to economic well-being and defines it as those factors that determine people's consumption possibilities and their command over resources. Quality of life is defined as those factors representing non-monetary attributes of individuals that shape their opportunities and life chances, and has some level of intrinsic value. It is recognized as varying across different cultures and contexts. Finally, the sustainability of the socio-economic and natural systems where people live and work is important for well-being to last over time. It depends on the impact of certain current human activities on the amount of different types of capital (natural, economic, human, and social) that underpin well-being that can be preserved.

Table 1
Framework for OECD's Well-Being Indicators

Individual Well-Being		**Sustainability of Well-Being Over Time**
Material Living Conditions	**Quality of Life**	**Preserving Different Types of Capital**
Income and wealth Jobs and earnings Housing	Health status Work and life balance Education and skills Social connections Civic engagement and governance Environmental quality Personal security Subjective well-being	Natural capital Economic capital Human capital Social capital

There are several reasons that support continuing research into corruption as a correlate of well-being and happiness. First of all, there is long been a general agreement that in order to properly assess the role of corruption in overall well-being and happiness, it is impossible not to consider a nation's political dimensions (Johnston, 1997). Beginning in the 1990s, many economists argued that malfunctioning governmental institutions could actually be a severe obstacle to innovation, entrepreneurship, and investment (Mauro, 1995).

For example, when trying to measure the extent of the relationship between government institutions and economic growth, Mauro (1995) asserted that institutions and economic variables evolved in concert with each other. In other words, those institutions may affect economic performance just as economic performance may affect institutions. Further, North noted that when a country's judicial system failed to protect individual rights by enforcing contract provisions, the result was often reduced economic performance (as cited in Mauro, 1995, p. 681). When bureaucracies reached the point of being described as cumbersome and dishonest, it often led to lengthy delays in the issuance of permits and licenses, causing significant slowdowns in the realization and implementation of technological advances into new equipment or new productive processes (Mauro, 1995).

Well-being and happiness are generally thought to be higher among democracies than among authoritarian regimes. However, using democracy as a correlate or determinant of well-being and happiness can be problematic since defining the term is difficult. The Economist Intelligence Unit (EIU)

indicates that democracy can be defined overall as a "set of practices and principles that institutionalize, and thereby, ultimately, protect freedom" (Economist Intelligence Unit, 2015, p. 42). Further, fundamental characteristics of democracies are said to include "government based on majority rule and the consent of the governed; the existence of free and fair elections; the protection of minority rights; and respect for basic human rights," along with "equality before the law, due process and political pluralism" (Economist Intelligence Unit, 2015, 42).

The Democracy Index, compiled annually by the EIU, measures the state of democracy in 167 countries. The countries included in the data set are categorized into full democracies, flawed democracies, hybrid regimes, and authoritarian regimes. Table 2 reflects each of the four regime types with their primary characteristics (Economist Intelligence Unit, 2015).

Table 2
Democracy Index Regime Type Characteristics

Full Democracies	Flawed Democracies
• Ensure basic political freedoms and civil liberties • Have satisfactory functioning of government • Have an independent and diverse media • Have an effective system of checks and balances • Have an independent judiciary in which judicial decisions are enforced • Have only limited problems in the functioning of democracy	• Ensures free and fair elections • Ensures respect for basic civil liberties • Defined by significant weaknesses in governance and participation
Hybrid Regimes	**Authoritarian Regimes**
• Have elections with substantial irregularities that prevent them from being both free and fair • Known for pressuring opposition parties and corruption • Journalists typically suffer harassment • Judiciary is not independent	• Often outright dictatorships without free and fair elections • Lack respect for basic civil liberties and an independent judiciary • Media are typically state-owned • Censorship flourishes

In its Democracy Index 2015 report, the EIU summarized its findings of regime types as reflected in Table 3. This year was one in which democracy was in crisis as it was tested through wars, severe acts of terrorism, mass migration, and other crises, and, as a result of some of these events, it suffered serious setbacks. Because these threats to democracy create a sense of fear that informs the reactions of ordinary people and political elites alike, there has been an increased sense of personal and societal anxiety and insecurity. The diverse perceived risks and threats related to economic, political, social and security issues are undermining democracy. This is to be expected given that democracy depends on a steadfast commitment to upholding such values as liberty, equality, fraternity, reason, tolerance, and free expression, and fostering both democratic institutions and a democratic political culture (Economist Intelligence Unit, 2015).

What is especially notable is the shift in the number of democracies in recent years. Since 1975 there has a quadrupling in the number of democratic countries worldwide. Since 1974, more than 90 countries have transitioned to democracy, and by the turn of the century approximately 60 percent of the world's independent states were democratic at least to some degree. The transition of Mexico and Indonesia in the late 1990s and the more recent "color revolutions" in Georgia and Ukraine soon after

the beginning of this century sparked a wave of democratic transitions. Even in the Arab world, the trend was evident; in 2005, democratic forces in Lebanon rose up to peacefully drive out Syrian troops and Iraqis voted in multiparty parliamentary elections for the first time in nearly half a century (Diamond, 2008).

Table 3
Democracy Index 2015 By Regime Type

	Number of Countries	% of Countries	% of World Population
Full Democracies	20	12.0	8.9
Flawed Democracies	59	35.3	39.5
Hybrid Democracies	37	22.2	17.5
Authoritarian Regimes	51	30.5	34.1

But by 2008 it was clear that celebrations of these democratic victories were premature. According to Diamond (2008), after decades of historic gains, the world slipped into what he identified as a democratic recession in which predatory states arose, threatening both newly-emerging and long-established democracies around the world. In just a few short years, the wave of transition was slowed by a powerful authoritarian movement, and the world-wide democratic recession was on. The global financial crisis that started in 2008 served to accentuate some of the existing negative trends in political development (Economist Intelligence Unit, 2011). More recently, democracy has been overthrown or gradually stifled in a number of key states, including Nigeria, Russia, Thailand, Venezuela, Bangladesh, and the Philippines.

The political malaise in Eastern and Central Europe has continued, creating disappointment and questioning the strength of the region's democratic transition. The concept of a free press has also eroded in Latin America and populist forces with dubious democratic credentials emerged in the region. The developed West began to experience severe declines in political participation, weaknesses in their governments' functions, and restrictions on a variety of civil liberties based upon security concerns. All of these conditions have served to have a corrosive effect on these long-established democracies (Economist Intelligence Unit, 2015). Such political instability has important policy implications for development in general, and for sustainable economic growth in particular since, by implication, this can be devastating for well-being. The ongoing turmoil in the Middle East is a perfect example. It is important to understand both the motives for the uprisings and the interplay of political, social, and economic factors that underpin them and will affect their likely course.

Just as democracy has been in a state of decline, so has freedom. According to Freedom House (2015), more aggressive tactics by authoritarian regimes combined with an increase in the frequency and level of violence in terrorist attacks to bring about a disturbing decline in global freedom in 2014, marking an overall drop in freedom for the ninth consecutive year (Freedom House, 2015). Nearly twice as many countries suffered declines as registered gains (61 to 33) and the number of countries with improvements hit its lowest point since the nine-year erosion began. Russia's invasion of Ukraine, a rollback of democratic gains by Egyptian president Abdel Fattah el-Sisi, Turkish president Recep Tayyip Erdoğan's intensified campaign against press freedom and civil society, and further centralization of authority in China were evidence of a growing disdain for democratic standards that was found in nearly all regions of the world.

In economics, early work on happiness looked first at the relationship between economic growth and happiness as typified by Easterlin's (1974) contribution relative to the impact of income on happiness in both developed and developing countries. Since then, economists have expanded their study of economic variables that contribute to happiness. For example, some identify unemployment as having its own impact on happiness beyond just the loss of income (Clark & Oswald, 1994 and Winkelmann & Winkelmann, 1998). Historically Gross Domestic Product (GDP) was the standard measure for a country's economic growth and development. However, in recent years, failure of GDP to fully explain the big picture has caused it to yield to human development as a more suitable measure of prosperity and growth. Those studying economic growth conceded that values such as equity, dignity, happiness, and sustainability were all fundamental to peoples' lives but were not discernible in the GDP. This led to the conclusion that progress and development should be defined and measured instead in a way that accounted for the broader scope of human development and its context. In its 2011 Human Development Report, the United Nations Development Program (UNDP) argued that the urgent global challenges of sustainability and equity must be addressed jointly, adding that certain policies on the national and global level could produce mutually reinforcing progress towards these two goals.

The fact is that policy makers have never focused on GDP growth alone as a single factor that produces well-being. Instead, they try to enhance well-being by taking into account a broad range of factors that go beyond the total value of goods and services produced by a country in a single year. The UNDP has been a leader in this shift in focus. In a high-level forum at the UN Conference on Sustainable Development in June, 2012, UNDP presented the concept of a future Sustainable Human Development Index, which would acknowledge the cost of human development to future generations. This kind of forward thinking clearly indicates that now, perhaps more than ever, ethical and responsible administrators and elected officials will be necessary in order to ensure adequate economic growth and development to maximize overall individual and national well-being for future generations.

Economic freedom is also essential for human development. It is said to exist when individuals can act with autonomy while pursuing their livelihood. Economic freedom takes into consideration the relationship between individuals and governments or other organized groups within a society. Where the level of economic freedom is high, people can control the rewards that result from hard work initiative. Individuals are empowered, entitled, and able to live based on choices they freely make. Success and failure are measured by one's individual effort and ability. Governmental institutions associated with a free and open society do not discriminate either against or in favor of individuals based on any factor unrelated to individual merit and decision-making by government is open and transparent (Miller & Reilly, 2015).

It should be apparent that a government's most effective policy for increasing wealth and economic growth would be one that would not increase its own spending or increase layers of regulation since both reduce economic freedom. Better results are likely to be achieved instead through policy reforms aimed at improving incentives that encourage entrepreneurial activity that would most certainly create more opportunities for greater economic growth. Research also indicates that there are fundamental benefits stemming from the strong positive relationship between economic freedom and levels of per capita income. For those countries demonstrating moderate to high levels of economic freedom the relationship between economic freedom and per capita GDP is highly significant (Miller & Reilly, 2015).

Countries moving up the economic freedom scale show increasingly high levels of average income. Economies rated "free" or "mostly free" in the 2016 Index enjoy incomes that are over twice the average levels in all other countries and more than five times higher than the incomes of "repressed" economies. An economically free society is one in which the power of economic decision-making is widely dispersed and the allocation of resources for production and consumption is on the basis of free and open competition so that every individual or firm has a fair chance to succeed. These three fundamental principles of economic freedom—empowerment of the individual, non-discrimination, and open competition—should underpin every democratic society (Miller & Reilly, 2015).

Looking at what the Heritage Foundation (2016) describes as four broad categories or pillars of economic freedom, it is not only apparent that corruption could be very detrimental, but that political stability and democratic values are essential to economic growth. First, the rule of law relates specifically to the need to ensure individual property rights and to provide freedom from corruption. Second, limited government serves to create fiscal freedom and effectively manage government spending. The third pillar of economic freedom, regulatory efficiency, is required for business freedom, labor freedom, and monetary freedom. Finally, open markets will lead to trade freedom, investment freedom, and financial freedom.

Still other researchers have linked happiness to a number of socioeconomic and socio-demographic conditions. Among them, happiness has been linked to factors related to education (Veenhoven & Choi, 2012) and physical health (Veenhoven, 1991). Education in particular is not only a fundamental human right; it is also a major force behind human and economic development. General societal benefits extend from strengthening personal integrity to shaping the societies in which we all live. In comparative studies of national budgets conducted annually, education typically represents 20-30 per cent of a country's budget. When it comes to education, it is obvious that the future of the entire world is at stake. When corruption prevents young people from exercising their fundamental right to attend school and receive an education, people lose out on their potential and society as a whole suffers. Identifying and eliminating corruption in the education sector is central to ensuring that learning opportunities remain accessible to all.

Efforts to reduce corruption in education have led many national governments to begin to heed words of caution from Transparency International and other corruption watchdog organizations. Newly emerging policies demand a commitment to high quality education that is available to all on an equal basis. To increase understanding of the problem, policy information, such as national, district, and school and university budgets, has been clarified and published so the general public can monitor how resources are allocated. Citizens have been given access to confidential complaint channels through which to report suspected corruption without fear of retaliation. Several countries have implemented clear regulations controlling education finance and management that give guidelines on new schools, exam processes, and fees. Further regulations have been placed in order to address irregularities in exam administration and grading. Regular external audits have made it possible to detect and deter fraud. Frequent school inspections have been instituted by some to prevent corruption in teacher management and behavior. Teacher qualifications have been developed to ensure quality of instruction.

Existence of corruption is incontrovertible. Corruption has been widely studied since it exists in some form in virtually country throughout the world and seems to have an effect on any number of aspects related to the economic, political, and social lives of citizens. Many individuals and

organizations have defined corruption and all seem to conclude that it generally represents some kind of misuse of public (official) power for private benefit. Specifically, it emerges where public officials with direct responsibility for distributing public goods or services or enforcement of regulations do so in exchange for private payment. Typically, those payments come out of the private sector, though not always. Corruption also tends to appear when those officials have virtual monopolistic power over the distribution of public benefits and that power increases as discretion over the distribution of benefits increases. Regardless of how one defines corruption, it is clearly a symptom of deep weaknesses in a nation's institutions. It undermines political, economic, and social outcomes and leads to widely spread problems in economic growth, investment, both domestic and foreign, educational achievement, and general public health, just to mention a few of the potentially affected areas and activities (Akcay, 2003).

It would seem logical to think that higher levels of corruption are naturally associated with lower levels of happiness in countries. Given this intuitive hypothesis, it is surprising that the happiness-corruption relation has received so little attention in previous empirical literature. In fact, with perhaps only one exception, a study by Graham and Chattopadhyay discussed in Graham (2011), research on the determinants of happiness has not resulted in a conclusion that corruption was a possible source. Graham actually defined corruption as "corruption victimization" and found that when using that definition, it does bear a negative relationship with happiness. Interestingly, upon adding a second variable, corruption norm, produced a positive correlation with happiness. This was interpreted by arguing that, "as in the case of crime, being a victim of corruption is mitigated in contexts where corruption is more common, and there are both less stigma effects and individuals have adapted or become accustomed to it" (Graham, 2011, pp. 122-23).

Researchers studying corruption have examined it both as an independent and dependent variable, identifying numerous determinants of corruption as well factors that are influenced by it. Despite the vast number of studies conducted in past research, more recent research appears to reveal three common threads. First, much of the current research depends upon the more subjective measures of corruption. In particular, these studies rely on a variety of indexes of corruption perception as suggested by survey responses from international business people, expatriates, risk analysts, as well as local citizens. It could be argued that these perception-based indexes are not the best sources for data since they rely on data based on "perceived" corruption rather than "actual" corruption. Sharafutinova (2009) concluded that, while this approach might be appropriate for advanced democracies, it is less effective for hybrid regimes. This is likely because in these regimes corruption allegations are often used in political battles, raising public perceptions of corruption such that they reflect more the degree of political competition rather than actual corruption. The data on public perceptions of corruption in regions previously dominated by the Soviet Union reported by Transparency International and the Information for Democracy Foundation (INDEM) have shown for many years that higher levels of political competition and press freedom along with lower economic development appear as the key variables contributing to higher public perceptions of corruption in former Soviet regions. Despite critics of the use of these indexes, Mocan (2008) justifies their use citing the difficulty in actually observing real levels of corruption in any country.

The second common thread found in recent corruption research is a tendency to focus primarily on cross-country variations in corruption stemming from the fact that data are more often available only in the aggregate level by country. An even closer examination of recent research into corruption reveals a third common aspect. The majority of studies available seem to either address the effects of corruption at the national level or at the individual level. That is, they explain the effects of corruption

on national concerns such as economic development or foreign investment, or they deal with personal issues such as personal income or personal health, but seldom both at the same time. This study seeks to examine both of these elements at the same time by assessing variables that contribute specifically to variables related to degree of internalization of principles associated with democratic governance, economic growth and development, and social factors related to education and health that have both individual and national implications for well-being.

There are two opposing approaches in the literature on corruption, regarding the impact of corruption: efficiency enhancing and efficiency reducing. This almost impossible contradiction has led to studies on the impact of corruption that generally conclude one of two things—that it either clearly enhances efficiency or it clearly reduces efficiency. For example, early studies by Leff (1964), Nye (1967), Huntington (1968), and Friedrich (1972) argued that corruption encourages business and commerce, thereby promoting economic growth and investment, resulting finally in a more efficient economy. On the other hand, McMullen (1961), Krueger (1974), Shleifer and Vishny (1993), Mauro (1995), and Tanzi and Davoodi (1997) found that corruption actually retards business and commerce, reducing economic efficiency.

The study of corruption's relationship to and effects on individual and national well-being among the world's nations today continues to grow increasingly complex as the focus has shifted from thinking of it as a wholly economic matter to one that comprises a larger number of factors. Individual and national well-being and happiness are closely linked to variables that can be used to measure the degree of democracy in governance, the level of economic growth, and a variety of social considerations within a given country. In today's world, there is clearly significant disparity in the amount of measureable well-being among countries in various regions. This disparity can only be examined by expanding the research beyond simply economic factors alone. The question examined in this study is whether or not corruption might be related to the ability of some countries to maximize their levels of both national and individual well-being and general happiness using both economic and non-economic factors.

Methodology

Subjects

Subjects for this study were nations found on a variety of indexes obtained from a number of different sources. Since the indexes vary in terms of country composition, N for each is based on the individual index and varies across the data. All data obtained represent the most recent version of the index at the time of the study's execution.

Variables

Corruption Factors.

Corruption perception.

Transparency International reported that in 2015, public outcry at corruption, impunity and economic instability sent shockwaves around the world. Protests in many countries quickly spread to

unite diverse people from all parts of society. Despite their diverse backgrounds, the protestors' message was the same: they demanded more transparency and accountability from their leaders.

The 2015 Corruption Perception Index shows that public frustration over is clearly justified. Transparency International uses the Corruption Perception Index to annually rank countries and territories according to their perceived levels of public sector corruption. They report it as an aggregate indicator that combines different sources of information about corruption, making it possible to compare countries. Literally every region or country in the world is affected by the damaging effects of corruption, and a tabular ranking of the 167 countries examined shows that the vast majority of them scored below five on a scale of 0 (highly corrupt) to 10 (very clean). The 2015 index draws on surveys and assessments that included questions related to the bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and the effectiveness of public sector anti-corruption efforts. Perceptions are used rather than actual occurrences because corruption is very much a hidden activity that is difficult to measure. Over time, perceptions have proved to be a reliable estimate of corruption. In the 2015 report, Denmark, Finland, and Sweden found their way to the top of the list representing those countries with the least amount of corruption, while North Korea and Somalia remained at the bottom in positions they have maintained for several years.

Bribe payers.

The Bribe Payers Index captures the supply side of international bribery, specifically bribes paid by the private sector. The 2011 Bribe Payers Index, based on the results of Transparency International's 2011 Bribe Payers Survey, ranks 28 of the world's largest economies according to whether firms from these countries are likely to pay bribes when doing business abroad. The survey asked 3,016 senior business executives in 30 countries around the world for their perceptions of the likelihood of companies from countries they have business dealings with to engage in bribery when doing business in the executive's country. The 28 countries and territories include the largest economies in terms of outward trade and investment and together represent 78 per cent of global foreign direct investment (FDI) outflows and exports.

The Bribe Payers Index scores range from 0–10 such that a score of 0 corresponds with the perceptions of business people around the world that companies from that country always pay bribes when doing business abroad. Consequently, a score of 10 corresponds with the perception that companies from that country never engage in bribery when doing business abroad. A score of 10 is therefore the goal of every country, as anything less than a 10 is an indication that companies from these countries are perceived to engage in bribery to some degree when doing business across borders. Scores that fall significantly short of a 10 indicate a serious problem, suggesting that companies from these countries are likely to engage in foreign bribery so frequently that it was recognized by the business executives who participated in the survey.

Political Factors.

Democracy.

The Democracy Index is based on 60 indicators grouped into five different categories: electoral process and pluralism, functioning of government, political participation, political culture, and civil liberties (Economist Intelligence Unit, 2015). This research includes a variable for the index taken as an

aggregated figure as well as measures for each of the five categories that comprise the index. In this way, correlation coefficients are observable for each of the categories to determine its relationship to corruption. Data were obtained from the Democracy Index for 2015.

Electoral process and pluralism.

The condition of having free and fair competitive elections and satisfying other related aspects of political freedom is clearly the basic requirement of all definitions of democracy. Data were obtained from the Democracy Index for 2015.

Functioning of government.

Most measures of democracy also include assessing how well government functions against some minimum standard of quality. If democratically based decisions either cannot be implemented or simply are not implemented for any reason, then the concept of democracy is rendered essentially meaningless. Data were obtained from the Democracy Index for 2015.

Political participation.

Participation is also a necessary component, since apathy and abstention weaken democracy. Even measures aimed at achieving effective processes associated with representative, liberal democracy include some aspects of participation. In a democracy, government is only one of many institutions, political organizations, and associations and citizens are free to decide for themselves whether or not they will participate in the political process. Democracies can thrive only if citizens are willing to actively take part in public debate, elect representatives, and join political parties. Data were obtained from the Democracy Index for 2015.

Political culture.

Democracy is defined by more than just its institutions. It is also essential to have a democratic political culture to create and preserve the legitimacy, smooth functioning, and sustainability of democracy. A culture characterized by passivity and apathy, with an obedient and docile citizenry, does not meet the needs of democracy. The electoral process often divides the population into winners and losers. A successful democratic political culture is one in which the losing parties and their supporters accept the will of the majority of the voters, and work together with them to effect a peaceful transfer of power. Data were obtained from the Democracy Index for 2015.

Civil liberties.

Civil liberties are a vital component of liberal democracy. The principle of the protection of basic human rights is widely accepted as evidenced by the fact that it is embodied in constitutions throughout the world and is included in numerous other documents and international agreements such as the U.N. Charter the Helsinki Final Act. Basic human rights including freedom of speech, expression and the press; freedom of religion; freedom of assembly and association; and the right to judicial due process are thus central to democracies everywhere. In all democratic systems citizens freely make political decisions by majority rule, but majority rule is not necessarily democratic. In a democracy it

must be combined with guarantees of individual human rights and the rights of minorities. Data were obtained from the Democracy Index for 2015.

Economic Factors.

Gross domestic product.

Gross domestic product (GDP) dollar estimates are derived using purchasing power parity (PPP) calculations, per capita. Such calculations are prepared by various organizations, including the International Monetary Fund and the World Bank. As estimates and assumptions have to be made, the results produced by different organizations for the same country tend to differ, sometimes substantially. PPP figures are estimates rather than hard facts, and researchers should use them with caution.

Comparisons of national wealth are also frequently made on the basis of nominal GDP, which does not reflect differences in the cost of living in different countries. Using a PPP basis is arguably more useful when comparing generalized differences in living standards on the whole between nations because PPP takes into account the relative cost of living and the inflation rates of the countries, rather than using just exchange rates which may distort the real differences in income. Other figures include savings (not just income), such as national wealth. GDP per capita is often considered an indicator of a country's standard of living; although this can be problematic because GDP per capita is not a measure of personal income. Data were obtained from the World Bank report for 2015.

Economic freedom.

The Index of Economic Freedom is an annual guide published by The Wall Street Journal and The Heritage Foundation. The Index of Economic Freedom has demonstrated for many years that countries with higher levels of economic freedom substantially outperform others in economic and policy-related areas such as economic growth, per capita incomes, health care, education, environmental protection, reduction of poverty, and overall well-being. The index tracks trends in economic freedom around the world by including measures of 10 specific freedoms grouped into four categories that gauge the economic success of 184 countries.

Table 4
Freedoms Comprising the Index of Economic Freedom

Category	Specific Freedoms
Rule of Law	Property Rights and Freedom from Corruption
Government Size	Fiscal Freedom and Government Spending
Regulatory Efficiency	Business Freedom, Labor Freedom, and Monetary Freedom
Open Markets	Trade Freedom, Investment Freedom, and Financial Freedom

It is worth noting that such indices are based on highly culturally contingent factors. The resulting index establishes categories of degree of freedom measured in each country according to the following scale: (1) Free – 80-100; (2) Mostly free – 70-79.9; (3) Moderately free – 60-69.9; (4) Mostly unfree – 50-59.9; (5) Repressed – 0-49.9. Data were obtained from the Heritage Foundation Economic Freedom Index for 2016.

Public debt.

Public debt is most often defined as the national debt, but in some countries it represents the total debt of all governmental units, including those of state and local governments. Further, it can be understood as an indicator of how much public spending is financed by borrowing instead of taxation. In economics, the public debt to GDP ratio is the ratio between a country's government debt and its gross domestic product. Data were obtained from Trading Economics for 2014.

Gross national income.

Gross national income (GNI) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. GNI per capita is gross national income divided by mid-year population. GNI per capita in US dollars is converted using the World Bank Atlas method. Purchasing Power Parity (PPP) is a method of measuring the relative purchasing power of different countries' currencies over the same types of goods and services, despite differential rates of inflation. PPP allows more accurate comparisons of standards of living across countries, because goods and services may cost more in one country than in another. Data were obtained from the United Nations Development Program, HDI for 2015.

Generalized inequality.

The Generalized Inequality Index, or Gini Index, measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini Index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus the Gini Index ranges from 0, representing perfect equality, to 100, which implies perfect inequality. The Gini coefficient is commonly used to measure inequality of income or wealth. The Gini coefficient is a controversial measure of income inequality due to its limitations for use. Not only does its value depend on income inequality within a country, its value depends on other factors such as the demographic structure. Countries with an aging population, or with a baby boom, experience increasing pre-tax Gini coefficient even if real income distribution for working adults remain constant. Scholars have devised over a dozen methods to calculate Gini, each of which gives a different value.

The Gini Index does have several limitations which include the following:

- *Different income inequality, yet same Gini*. Even when the total income of a population in two different countries is the same, in certain situations those same two countries can have very different income distributions and still have the same Gini index.

- *Extreme wealth inequality, yet low income Gini coefficient*. Gini index loses information about absolute national and personal incomes. Populations can have very low income inequality Gini indices yet simultaneously very high wealth Gini index.
- *Small sample bias - sparsely populated regions more likely to have low Gini coefficient*. Gini index has a downward-bias for small populations. Counties or states or countries with small populations and less diverse economies will tend to report small Gini coefficients. For economically diverse large population groups, a much higher coefficient is expected than for each of its regions.
- *Same population with same income distribution, analyzed differently, yields different Gini coefficients*. As with other inequality coefficients, the Gini coefficient is influenced by the granularity of the measurements. Gini coefficient is unable to discern the effects of structural changes in populations. Expanding on the importance of life-span measures, the Gini coefficient as a point-estimate of equality at a certain time, ignoring life-span changes in income. Typically, increases in the proportion of young or old members of a society will drive apparent changes in equality, simply because people generally have lower incomes and wealth when they are young than when they are old.
- *Gini coefficient falls yet the poor get poorer; Gini coefficient rises yet everyone gets richer*. Arnold describes one limitation of Gini coefficient to be income distribution situations where it misleads. The income of poorest fifth of households can be lower when Gini coefficient is lower, than when the poorest income bracket is earning a larger percentage of all income.
- *Inability to value benefits and income from an informal economy affects Gini coefficient accuracy*. Some countries distribute benefits that are difficult to value. Countries that provide subsidized housing, medical care, education or other such services are difficult to value objectively, as it depends on quality and extent of the benefit. In absence of free markets, valuing these income transfers as household income is subjective. The theoretical model of Gini coefficient is limited to accepting correct or incorrect subjective assumptions.

Data for the GINI Index were obtained from the CIA World Factbook. It should be noted that data reported in that source are not for a single year. Each country's data are reflective of the measure in the last year that they were collected for inclusion in the report.

Human development.

The Human Development Index (HDI) is a composite statistic used to rank countries by level of human development, which has become synonymous with the older terms "standard of living" and/or "quality of life." It can be interpreted as falling into general categories of "very high human development", "high human development", "medium human development", and "low human development" countries. The HDI is a comparative measure of life expectancy, literacy, education, and standards of living of a country. It has evolved into a standard means of measuring a country's well-being, especially child welfare. It has also been used to distinguish whether the country is a developed, a developing, or an underdeveloped country, as well as to measure the impact of economic policies on quality of life. Four values go into calculating the human development index (HDI) for a particular country. The first value is life expectancy at birth. The next two values are related to education. The first, adult literacy rate, is the percentage of adults in the country who are literate. The second measure of education is the combined primary, secondary, and tertiary (that is, post-secondary) education enrollment as a percentage of all people in the appropriate age groups for primary, secondary, and post-

secondary school who are actually enrolled in school. The final value that goes into computing a country's HDI is GDP per capita at purchasing power parity, given in U.S. dollars, representing the value of all new final goods and services produced within a country in that year divided by the average population for the same year. The HDI formula results in a number from 0 to 1, with 1 being the best outcome possible. Data were obtained from the United Nations Development Program, HDI for 2015.

Social Factors.

Mean years of schooling.

Mean years of schooling is a measure of the average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level. Data were obtained from the United Nations Development Program, HDI for 2015.

Expected years of schooling.

Expected years of schooling represents the number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life. Data were obtained from the United Nations Development Program, HDI for 2015.

Literacy.

Literacy represents the percentage of the population ages 15 and older who can, with understanding, both read and write a short simple statement on their everyday life. Data were obtained from the United Nations Development Program, HDI for 2015.

Reading, science, and math scores.

Reading, science, and math scores represent those obtained in testing of skills and knowledge of 15-year-old students in these subjects essential for participation in society. Data were obtained from the United Nations Development Program, HDI for 2015.

Health care expenditures.

Health care expenditures as a percent of GDP is a measure of the current and capital spending on health from government (central and local) budgets, external borrowing and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds, expressed as a percentage of GDP. Data were obtained from the United Nations Development Program, HDI for 2015.

Life expectancy at birth.

Life expectancy at birth is an indicator of the number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life. Data were obtained from the United Nations Development Program, HDI for 2015.

Infant mortality.

Infant mortality has been used widely in research as a measure of the level of health in a country. The data reflect the number of deaths of infants under one year of age in a given year per 1,000 live births in the same year. Data were obtained from the United Nations Development Program, HDI for 2015.

Findings and Discussion

Table 5 reflects the descriptive statistics for the data set. A few of the results bear at least some discussion. First, the Corruption Perception Index score for countries ranges from 0 to 100. The actual scores for the year studied range from 8 to 91. While it may at first seem trivial, it may be important to note than no country was perceived as being completely immune from corruption and no country reached the point of being perceived as completely corrupt. At the same time, the mean score on perceived corruption of 42.57 suggests that corruption remains a noticeable problem around the world.

Table 5
Descriptive Statistics

Variables	N	Mean	SD	Minimum	Maximum
Corruption Perception Index	168	42.57	20.043	8	91
Bribe Payers Index	28	7.80	0.67	6.1	8.8
Democracy Index	167	5.55	2.187	1.08	9.93
Human Development Index	187	0.69	0.154	0.348	0.944
Happiness Index	157	5.37	1.146	2.839	7.587
Electoral Process and Pluralism	167	5.97	3.531	0.00	10.00
Functioning of Government	167	4.97	2.506	0.00	9.64
Political Participation	167	5.10	1.859	1.11	10.00
Political Culture	167	5.65	1.648	1.25	10.00
Civil Liberties	167	6.15	2.780	0.00	10.00
Gross Domestic Product (PPP)	177	18,978.56	22,087.334	594.20	140,649.20
Public Debt	172	47.02	33.088	1.60	230.00
Economic Freedom	178	60.44	11.229	1.3	89.6
Gross National Income (in $)	189	16,966.85	18,703.449	581	123,124
Generalized Inequality Index (% of GDP)	142	42.36	35.315	23.7	446
Educational Spending	159	4.82	2.045	0.1	13.0
Mean Years of Schooling	187	8.14	3.086	1.4	13.1
Expected Years of Schooling	187	13.24	5.254	4.1	73.5
Literacy	150	81.62	20.310	15.5	99.9
Reading Test Score	63	472.33	46.556	384	570
Math Test Score	63	477.19	50.477	373	580
Science Test Score	63	471.10	54.239	368	613
Health Spending	183	6.71	2.602	1.3	17.1
Life Expectancy	187	71.18	8.329	49.0	84.0
Infant Mortality Rate	185	25.20	23.276	1.6	107.2

The correlational analysis using perceived corruption as X and each of the general indexes as well as each of the political, economic, and social variables as Y, reveals no real

surprises. Table 6 displays the results of a correlational matrix for the data set. What is immediately apparent is the fact that perceptions about corruption do in fact correlate impressively with each of the variables included except the GINI. For the data included in this study, all correlations obtained were statistically significant to a level of 0.000. While the results themselves may not be all together surprising, their implications raise certain questions that may be important to future research into this subject.

Table 6
Correlation Analysis

	CPI (X)			BPI (X)		
Y	***r***	**p<**	**N**	***r***	**p<**	**N**
General Indexes						
Democracy Index	.73	0.000	163	.73	0.000	28
Human Development Index	.74	0.000	163	.66	0.000	27
Happiness Index	.68	0.000	155	.56	0.002	28
Political Variables						
Electoral Process and Pluralism	.57	0.000	163	.59	0.001	28
Functioning of Government	.76	0.000	163	.79	0.000	28
Political Participation	.60	0.000	163	.51	0.006	28
Political Culture	.70	0.000	163	.73	0.000	28
Civil Liberties	.66	0.000	163	.68	0.000	28
Economic Variables						
Gross Domestic Product (PPP)	.73	0.000	135	.50	0.001	26
Economic Freedom	.78	0.000	160	.64	0.000	28
Public Debt	.34	0.000	162	.51	0.001	28
Gross National Income (in $)	.75	0.000	164	.54	0.003	27
Generalized Inequality Index (GINI)	-.13	**0.130**	137	-.53	0.004	26
Social Variables						
Educational Spending	.32	0.000	145	.32	**0.119**	25
Mean Years of Schooling	.63	0.000	165	.59	0.001	27
Expected Years of Schooling	.34	0.000	165	.55	0.003	27
Literacy	.37	0.000	138	-.11	**0.696**	15
Reading Test Score	.60	0.000	61	.38	**0.067**	24
Math Test Score	.50	0.000	61	.32	**0.127**	24
Science Test Score	.50	0.000	61	.38	**0.067**	24
Health Spending	.50	0.000	160	.62	0.001	26
Life Expectancy	.68	0.000	163	.57	0.002	27
Infant Mortality Rate	-.60	0.000	161	-.44	0.024	26

It is important to remember that the data for measuring perceived corruption are based on a scale that runs from 0 to 100 in which 100 expresses the lowest perceived level of corruption and 0 represents the highest level. Thus the results of the correlational analysis must be interpreted such that each variable correlated with corruption increases as the level of corruption decreases. This is the outcome that would be expected. The only relationship that was not statistically significant was the one between corruption and the General Inequality Index where the interpretation of the results could be that the problems associated with measurement of the GINI make it necessary to consider further exploration to determine

whether there is an intervening or moderating variable involved in that relationship that is not included in this study.

One interesting finding was observed in the results for the relationships between the tolerance for paying bribes as a specific type of corrupt activity and the selected education variables. There the level of spending on education as well as outcome measures for literacy and test scores for reading, mathematics, and science all resulted in relationships that were not statistically significant. It must be noted, however, that the Bribe Payers Index includes only a small sample of countries (28), some of the data are more than 15 years old, and the countries included consist of a large number of developed countries in contrast to those classified as developing or transitioning.

With the amount of attention that corruption has received in the last twenty years, especially in terms of its effects on any number of political, economic, and social factors, to include those studied here, these results do beg the question of why so many countries have still not been either able or willing to contain the problem. It seems clear that little has changed in the relationship between perceived corruption and these variables over time.

Future research should be done to focus on the role of corruption in the production of well-being and happiness. In particular, much work is needed in the area of happiness production. This study has merely reaffirmed the relationship between corruption and well-being and happiness. Continuing research must turn to studies to examine the nature of those relationships to include causal associations. People throughout the world are becoming more involved in the processes of governance and in part they measure the success of their efforts on how much they realize the personal inner feelings associated with subjective happiness as a result. Where corruption stands in the way of democratic governance, successful democratic governance is not as likely. The resulting political, economic, and social degradation cannot be denied. Sadly, it just may be that tolerance for corruption may persist for some time as corruption may be so deep-rooted in many societies that it has reached the point of being virtually indiscernible among a multitude of other depravities.

Conclusion

The relationship between corruption and well-being and happiness clearly is a complex one. But unraveling it is essential for governmental leaders, policy makers, and citizens. Leaders and policy makers are charged with creating policy but an important question is what should be the goal of that policy. What matters is the quality of life, as people themselves experience it. Everyone wants to be happy, and increasingly, countries around the world are looking at happiness as an indicator of national well-being and considering happiness in policy making. In a democracy that should be the criterion of good policy. In the words of Thomas Jefferson, “The care of human life and happiness…is the only legitimate object of good government” (1809). Making improved well-being and happiness the focus of public policy is likely to produce very different priorities for policy makers and the policies they create. Unless and until corruption and its relationship to well-being and happiness are better understood, public policy may not make the necessary shift to priorities more in keeping with the promotion of democracy and good governance.

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