Why Do So Many Underdeveloped Economies Seem Not to Develop? The Impact of Public Social Governance

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In the early 1980s, over 2.1 billion people were facing a hopeless future by getting by on less than $3.10 a day (and sometimes as little as $1.90 a day) despite living in a world of over-abundance. Given the impact of indigence on world stability and human solidarity, winning the fight against poverty is a critical issue for all people, whether rich or poor. Using proxies representing social and political pressures faced by governments striving toward development, we measure the impact of public governance on poverty decrease. We explain why most poor countries seem to be failing in their development initiatives, or, at the very least, are caught in an impasse. Using a sample of 177 countries in 2016, regressions are run to test the impact of public social governance on poverty. On average, poor countries underperform compared to rich ones. We suggest why weak public social governance can be a serious impediment to national development.

Keywords: Public Governance, Poverty, Development, Gross Domestic Product, Millennium Development Goals, Development Assistance Movement, Poverty Threshold, Low-income Economy

INTRODUCTION

For the last eight decades, the international community has been relatively serious in its fight against world poverty, devoting much attention, effort and resources to development assistance. Results continue to be mitigated. Although one cannot ignore the major role of some deplorable events of the past in building poverty and delaying development, highlighting historical responsibilities, as legitimate as this may be, only diverts attention from the main objective of the fight against poverty and the gains to be made in development. Fighting poverty and underdevelopment is neither easy to conceive of nor straightforward to operationalize. Nevertheless, ensuring that governments with underdeveloped economies adopt efficient behaviours toward development is critical for the effectiveness of their development. Some specific actions and attitudes toward development must be adopted, since they seem to be crucial to any successful development endeavour. This paper deals with one such attitude, that may, at least empirically, help explain why most poor and underdeveloped countries seem to be missing the golden opportunities afforded by today's unprecedented state of knowledge. We assume that government can be thought of as a diversified institution whose objective function is the maximization of the common welfare of all its citizens. More specifically, we test the impact of what we call "public social governance," or PSG, on economic development, using a sample of 177 countries for the year 2016. We

find that, on average, poor countries underperform compared to rich countries on PSG, and we reveal some of the reasons why national development can be seriously jeopardized by weak PSG.

FIGHTING POVERTY AND UNDERDEVELOPMENT

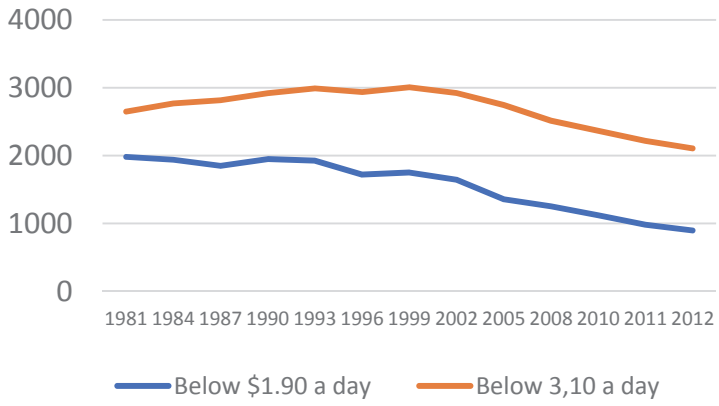
Efficiently managing development and the battle against poverty in the world today is a critical issue facing all people, rich and poor alike. Poverty and underdevelopment lead to multidimensional events such as hopeless futures, malnutrition, privation, exclusion, diseases and other serious yet avoidable evils. As a result, the poor have lower life expectancies and experience daily hardships (U.K. White Paper, 2000). As a remedy, shared prosperity may lead countries to a better future and in the process be the only cure for today's world problems. For this reason, eradicating poverty and underdevelopment must be considered everyone's responsibility. The crafters of Bretton Woods echoed that thought as early as 1944 when they shared their deep concern about world misery and underdevelopment, even considering this issue the main trigger of the devastating First and Second World Wars. They consequently established the now renowned multilateral financial institutions the World Bank (WB) and the International Monetary Fund (IMF). Later, they launched the development assistance movement (DAM) with the sole objective of fighting poverty and human exclusion and promoting global economic development. They seemed to be aiming for a global shared wellbeing, particularly the countries and territories that were then seen to be grappling with intolerable economic insufficiencies.

It appears that the general awareness created by the Breton Woods movement of 1944 has led to a steady decline in the percentage of poor people in the world, particularly since the 1950s. In its 2015 report on Millennium Development Goals (MDG), the United Nations (UN) expressed its wish to build on the initial and unprecedented human solidarity momentum that began in 1944 by setting for itself the grandiose yet honourable objective of ending all forms of poverty by the dawn of 2030. As of 2016, however, it was estimated that as much as 10 percent of the world's population was still considered to be living in poverty and precarious conditions. The MDG did not seem to have laid down any specific path to be followed in the fight against poverty, except for suggesting a benchmark for rich countries to reach with respect to their development aid contribution. No country has met these targets so far, and regrettably, in a world of expanding wealth and material plenty, there are still over a billion people "whose lives are blighted by poverty and robbed of their dignity" by exclusion (U.K. White Paper, 2000).

Though helpful, the international definition of poverty appears very conservative, to the extent that it may not encompass all the situations of poverty around the world. In this study, we assume that development reduces poverty, and that whenever an economy improves, it also experiences a decrease in poverty.[1] It is also important to note that according to the international understanding of poverty, a population is considered poor if its per capita Gross National Income, or pcGNI, is under $3.10 per day, and it lives under the daily poverty threshold and purchasing power parity established by the World Bank in 2015, which is less than $1.90 pcGNI a day.

Notwithstanding the above, historical data on poverty, as plotted in figure 1, show the convincing and significant gains that have been achieved against poverty.

FIGURE 1
POPULATION LIVING ON LESS THAN $1.90 AND $3.10 A DAY ($ MILLION, 2011)



The sizeable improvements reported in Figure 1 pertain to populations living daily above the GNIs of $1.90 and $3.10 for the poverty threshold and purchasing power respectively, for each three-year period between 1981 and 2012. The population living below the $1.90 daily threshold has decreased from its 1981 level of around 2 billion people to 897 million people in 2012, this segment representing 14.9% of all low- and-middle-income economies. This is obviously a tremendous achievement, especially when we recall that the total world population almost doubled in the meantime[2] (Oxfam. 2015). The population living on less than $3.10 a day has, however, decreased only slightly since 1981, when it was 2.65 billion people and represented 71.5% of all low- and-middle-income economies, to a total of 2.106 billion in 2012, corresponding to 34.9% of all low- and middle-income economies. This considerable improvement is tempered by the fact that the main drop in the poverty rate occurred in only a few countries, especially China, India and Brazil (Roberts, 2010). However, any improvement anywhere is good news.

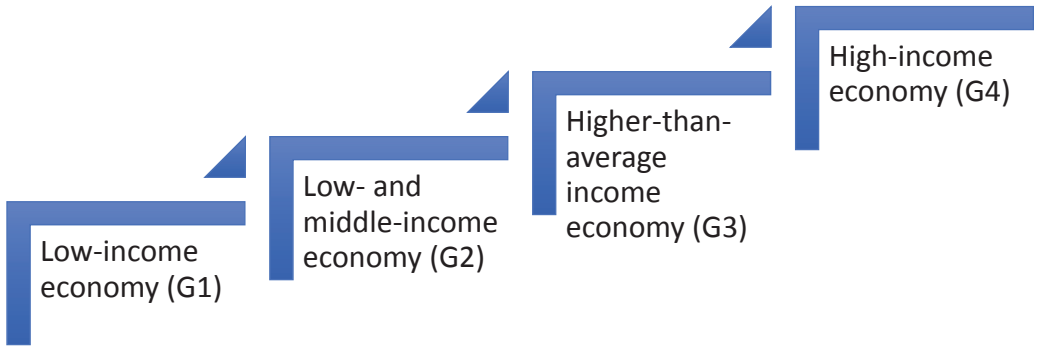
Most poor people in the world live in so-called developing environments, designated by the international community as "low- and middle-income countries." As mentioned earlier, when people live on around $3.00 a day, they are not considered to be living in poverty. The $1.90 GNI per day income threshold amounts to approximately $700 per year, while $3.10 per day adds up to $1,131 per year. This is barely the equivalent of the cost of a single dinner in a luxury restaurant. In light of these statistics, the poverty experience is almost unfathomable and can only be understood by those who live it.

Despite uncertainties in describing the progress made in the fight against poverty, an important fact remains: all regions of the world seem to have experienced a great deal of improvement during the last decades, albeit not equally. Indeed, South Asia and Sub-Saharan Africa seem to have benefited the least, with both environments respectively reporting 18.8% and 42.7% of their populations living on less than $1.90 a day in 2012. Unfortunately, if the poverty line is raised to the $3.10 a day level, South Asia and sub-Saharan Africa show a near-zero improvement. In 2012, the following populations had less than $3.10 to live on each day: 22.2% of East Asia and the Pacific, 67.0% of Sub-Saharan Africa, 6.2% of Europe and Central Asia, 12.0% of Latin America and the Caribbean, 16.0% of the Middle East and North Africa and 4.5% of South Asia.[3] These figures show that progress is within reach.

Following traditional practice, gross national income (GNI) and gross domestic product (GDP) are alternatively used in this paper to express economic advance, depending on availability and opportunity. GDP per capita is commonly expressed as the sum of the value added by all resident producers, plus any product taxes (minus subsidies) not included in the valuation of output (World Bank, 2015b). GNI per capita is expressed as the total income generated by domestic production, including income from trade. The two measures diverge only slightly, as the GNI is simply the GDP increased by the balance of primary income flows from the rest of the world (GNI = GDP + BPI). BPI is usually defined as household

incomes from direct and indirect economic activity, excluding social benefits. The World Bank has specific country classifications based on economic advance, shown in Figure 2.

FIGURE 2
WORLD BANK COUNTRY CLASSIFICATION



In Figure 2, G1 (low-income economies) is composed of economies with a per capita GNI of $1.035 or lower, and G2 (low- and middle-income economies) is comprised of economies with a per capita GNI of more than $1.035 but less than $4.085. G3 (higher-than-average income economies) consists of economies with a per capita GNI of $4.085 but less than $12.616, while G4 (high-income economies) represents economies with a per capita GNI of $12.616 or greater.

Several characteristics distinguish developing economies (G1, G2 and G3) from developed economies (G4). For instance, for the 2012 financial year (the most recent year of recorded financial numbers appearing in the World Bank's 2014 little data book), developing economies accounted for 81.55% of the world's population (5.74 billion out of a total population of 7.04 billion) and were responsible for 118.18% of the growth rate of the world population. However, they contributed only 30.57% of the world's gross income and their per capita GNI represented only 51.70% of worldwide per capita GNI. The situation for low-income economies appears to be of even greater concern when expressed in terms of wealth. Indeed, these economies benefited from only 0.7% of world wealth, and 0.01% when expressed in terms of per capita GNI and purchasing power parity (PPP). The population growth of these economies represented 209.09% of the average growth of the world's total population in 2012, an increase that reversed all progress made in the fight against poverty and that has led to a greater risk of relapse for economies that had recently progressed in their fight against poverty.

It might be interesting to find out why so many countries seem to be unable to escape the grip of privation, while others have made their way out of poverty and toward some improvement in development. This paper examines one possible reason, namely public social governance.

PUBLIC SOCIAL GOVERNANCE (PSG)

According to recent world development and economic progress maps, economic development often appears to conform to the basic wealth maximization rule and may therefore be dealt with within the same theoretical frame. A nation develops when it efficiently manages its development, i.e. when it observes the rule of national wealth maximization. National wealth is defined here as financial considerations encompassing social wealth, quality of education, health, sanitation, etc. Development can occur only when all development projects have positive social and/or financial net present values. This is possible only when citizens enjoy "citizens' freedom" in a way that permits them to participate in national development. This occurs consequently when the national GDP is given the maximum chance to grow through development projects, innovation and the fulfillment of citizens' dreams. In such circumstances,

citizens can enjoy easy access to opportunities and face only a limited number of barriers and irritants that reduce their ability to innovate and exercise their entrepreneurial capacity and skill (World Bank, 2017).

An economy's ability to put its citizens to work depends strongly, however, on the economy's ability to invest in key sectors of development such as education and training, sanitation, infrastructure and the like. No country has ever been able to make economic and social progress without circumventing two main constraints, in addition to ensuring citizen participation in every type of development process and decision making: first, a country should be able to convince its citizens to abide by its laws, particularly tax laws. This is usually possible only when the nation conducts itself appropriately and demonstrates credible, consistent and fair application of its laws (World Bank, 2017), which enables public institutions to operate at acceptable levels of fairness and efficiency. As a result, the nation will gain easy access to sufficient local financing through tax collection, and eventually can turn to the international market to deal with its debt. Second, countries must see that they have decent access to the international financial capital market by gaining international credibility.

Regarding the first requirement, a sufficient income collection system, coupled with a fair public expenditure system, should be established. It should be geared toward protecting citizens against the vagaries of life while shielding them through appropriate policies that reduce social disparities (World Bank, 2017). Regarding international financial market access, it is readily admitted today that countries with efficient collection systems also enjoy easy access to the market for debt. Since the efficiency and rigour with which countries manage their development also dictates interest rate levels, countries will be charged for their debt at international market levels. In other words, a country with a well-established, fair and sufficient income collection system, backed by a tradition of well-managed national finances, will also be considered to present less risk and will therefore be entitled to lower cost of debt. For example, some developing countries were recently charged as much as 6.125% interest on their international debt issues, while developed countries were enjoying less than 1% interest, or even negative rates.

These development requirements are included in the current section because they are the main prerequisite for economic development and success against poverty, since the more prosperous countries are also considered to have the best PSG systems. It is therefore reasonable to hypothesize that some level of PSG is conducive to the highest levels of development (World Bank, 2017). Investment in PSG has, however, been slow to produce the returns anticipated. It is expected to be economically profitable only once adequately trained and healthy generations have accessed employment in adulthood and can thus contribute efficiently to the common wellbeing of their nation. Such misunderstanding regarding the PSG payoff is common among citizens who prefer to hear comforting political lies rather than the hard truth. This situation may seriously hinder some governments from engaging in positive but difficult development initiatives.

We chose to approximate PSG with a model developed by The Fund for Peace (FFP), titled the Fragile States Index (FSI). This model highlights social and political weaknesses that any government may experience in regard to its PSG (The Fund for Peace). Despite any criticisms that can be made, the model offers a somewhat faithful representation of cohesion, living conditions and political and social environment quality. This is summarized by a single score called the PSGscore.

(i) *The Cohesion Category (*cC) describes cohesion within society and can be measured through three components.

$$cC = SA + FE + GG \qquad \text{E.1}$$

where:
SA is the Security Apparatus component, which considers the security threats to a state, such as bomb attacks, serious criminal factors, such as organized crime and homicides, and citizens' perceived trust in domestic security;

FE is the Factionalized Elites component, encompassing the fragmentation of state institutions along ethnic classes and clans and racial or religious lines, as well as brinksmanship and gridlock between ruling elites; and

GG is the Group Grievance component, which represents divisions and schisms between different groups in society, based on social or political characteristics and the groups' access to services or resources and inclusion in the political process.

(ii) *The Living Conditions Category (cL)* describing economic conditions measured through three components:

$$cL = ED + UE + HF \quad \text{E.2}$$

where:
ED is the Economic Decline component, which considers how trends in living conditions affect the decline of a society as a whole, measured by a number of variables such as unemployment rates, inflation, productivity, level of debt, poverty levels and business failures;

UE is the Uneven Economic Development component, representing inequality within the economy, irrespective of its performance. For example, the indicator looks at structural inequality based on groups (such as racial, ethnic, religious or other identity groups), or based on education, economic status, and regions, such as the urban-rural divide; and

HF is the Human Flight and Brain Drain component, illustrating the impact of human displacement on living conditions and the consequences this may have on these conditions.

(iii) *The Political Category (cP)* describing political stability and fairness and measured through three components:

$$cP = SL + PS + HR \quad \text{E.3}$$

where:
The State Legitimacy component (SL) represents the representativeness and openness of government and its relationship with its citizenry;

The Public Services component (PS) refers to the presence of basic state functions that serve the people. This may include the provision of essential services such as health care, education, water and sanitation, transport infrastructure, electric power, the internet and connectivity; and

The Human Rights and Rule of Law component (HR) considers the relationship between the state and its population and the extent to which fundamental human rights are protected and freedoms are observed and respected.

(iv) *The Social Category (cS)* describing social conditions and measured through three components:

$$cS = DP + RI + EI \quad \text{E.4}$$

where:

DP is the Demographic Pressures component, which considers pressures on the state from the population itself or the surrounding environment. For example, the indicator measures population pressures related to food supply, access to safe water and other life-sustaining resources, and health effects;

RI is the Refugees and Internally Displaced Persons component, which measures the pressure on states caused by the forced internal displacement of large communities as a result of social, political. environmental or other causes and refugee flows into other countries; and

EI is the External Intervention component, representing the influence and impact of external actors on the functioning of a state.

We ask whether underdevelopment and poverty are rooted in the weakness of the social governance of countries. We therefore link the progress of country per capita Gross National Product, or pcGNP, to the quality of its PSG, or PSGscore. We hypothesize that the higher a country's PSGscore, the better its economic performance and the more efficient its fight against poverty. The FSI of The Fund for Peace is used as the Public Social Governance score (PSGscore). It classifies countries on a scale of 1 to 114, with 1 representing the highest governance level and 114 the lowest. Hence, the higher the score, the least effective the country's PSG. The strength of the PSGscore resides in the fact that millions of pieces of information are distilled into an index that is relevant as well as easily digestible and informative. FFP daily collects thousands of reports and pieces of data from around the world, detailing current social, economic and political pressures facing each of the countries analyzed.

SAMPLE DATA AND METHODOLOGY

The sample is composed of 177 economies drawn from the world's 198 countries (Appendix 1), for which the per capita GDP and FSI are available.[4] The data were collected from several notable sources:

(i) Data on country per capita gross national product (pcGDP) were retrieved from the World Factbook[5] 2016. The pcGDP is commonly used to measure a country's economic progress and is defined as the GDP on a purchasing power parity basis, divided by the population as of 1 July of that same year; and

(ii) Data on the country's Public Social Governance score, or PSGscore, were retrieved from the FSI of the Fund for Peace.[6] Note, as underlined previously, that PSGscores are classified on a scale of 1 to 114, with 1 representing the highest governance level and 114, the lowest.

The empirical objective of this study is to find out, using regression and quality of governance ratio analysis, whether PSG has any positive/negative effect on countries' economic performance, as expressed by the behaviour of the pcGDP. However, the pcGDP may not fully capture a nation's wealth when a measure of its dispersion is missing, which is the case with international data. It is, however, reasonable to assume that the greater a country's development, the narrower the dispersion of its pcGDP.

A statistical summary of the variables used during the sample period is given in Table 1. One hundred and seventy-seven countries are included in the analysis, indicating that the sample comprises almost all of the world's 198 countries.

TABLE 1
DESCRIPTIVE STATISTICS

	N	Mean	Std Deviation
pcGDP	177	$19,283.05	$21,171.847
Ln (pcGDP)	177	4.0646	0.86065
PSGscore	177	69.7429	24.07719
Security Apparatus	177	5.7062	2.32726
Factionalized Elites	177	6.4616	2.39350
Group Grievance	177	6.1627	2.03078
Economy	177	5.6746	1.94789
Economic Inequality	177	5.8638	2.13500
Human Flight and Brain Drain	177	5.6853	2.14635
State Legitimacy	177	6.0768	2.60502
Public Services	177	5.4881	2.68058
Human Rights	177	5.7672	2.56634
Demographic Pressures	177	5.8040	2.49878
Refugees and IDPs	177	5.2655	2.34913
External Intervention	177	5.7870	2.54315

As reported in the descriptive statistics table, the mean value of the pcGDP is $19,283.05 and its standard deviation is $21,171.85. The sample's highest pcGDP in 2017 was $127,700 and was recorded by Qatar, while the lowest value, attributed to the Central African Republic, was $700. Given the high dispersion of the pcGDP, the study uses its logarithm (log(pcGDP)) instead. The average pcGDP is 4.0646, with a standard deviation of 0.86065. The mean value of the overall PSGscore is 69.74 points, with a standard deviation of 24.07 on a scale of 114. Individual components of the PSGscore ranges from 6.46 for the Factionalized Elites component and 5.26 points for Refugees and IDPs, still on the 114 scale. These components have standard deviations varying between 2.39 and 2.34. The highest PSGscore of 18.70 for 2017 was obtained by Finland, while Sri Lanka had the lowest score for that same year, at 113.90. The final 177-country sample is composed of countries at different levels of development: low-income economies, or G1 (30 economies with a per capita GNI of $1,035 or lower), low- and middle-income economies, or G2 (50 economies with a per capita GNI of more than $1,035 but less than $4,085), higher-than-average income economies, or G3 (50 economies with a per capita GNI of $4,085, but less than $12,616), and high-income economies, or G4 (46 countries with a per capita GNI of $12,616 or greater).

Regression analysis is performed on data. Equation E.5 describes the statistical relationship between the growth of per capita GDP and the PSGscore:

$$\log(pcGDP_i) = \alpha + \beta_1 \, PSGscore + \varepsilon_I \qquad E.5$$

where:
$\log(pcGDP_i)$ is the logarithm of per capita GDP for a given country for the year 2017; PSGscore is the public social governance score allocated to a given country by FFP for 2017; β α and $+\varepsilon_I$ are respectively the regression coefficients and the residual.

The PSGscore is composed of 12 different components, as discussed in the previous sections (security apparatus, factionalized elites, etc.) To assess the individual impact of each component of PSG, we run an additional **multivariate** regression on all 12 components:

$$\log(pcGDP_i)=\alpha+\beta_1 SA_{i+}\beta_2 FE_{i+}\beta_3 GG_i+\beta_4 ED_{i+}\beta_5 UE_i+\beta_6 HF_{i+}\beta_7 SL_i+\beta_8 PS_{i+]}$$
$$\beta_9 HR_i+\beta_{10} DP_i+\beta_{11} RI_i+ \beta_{12} EI_i + \varepsilon_i \quad \text{E.6}$$

where:
SA = Security Apparatus; FE = Factionalized Elites; GG = Group Grievance; ED = Economic Decline; UE = Uneven Economic Development; HF = Human Flight and Brain Drain; SL = State Legitimacy; PS = Public Services; HR = Human Rights and Rule of Law; DP = Demographic Pressures; RI = Refugees and Internally Displaced Persons; EI = External Intervention; and α β and $+\varepsilon_I$ are respectively regression coefficients and residual.

It may be interesting to identify the components that matter most. For this purpose, stepwise analysis is also performed. **This will allow us to regress the PSGscore on its 12 components while removing unimportant components**[7] **(E.7)**. At the end of this process, we will be left with only the variables that best explain the countries' PSG.

$$\log(pcGDP_i)=\alpha+\beta_1 SA_{i+}\beta_2 FE_{i+}\beta_3 GG_i+\beta_4 ED_{i+}\beta_5 UE_i+\beta_6 HF_{i+}\beta_7 SL_i+\beta_8 PS_{i+}$$
$$\beta_9 HR_i+\beta_{10} DP_i+\beta_{11} RI_i+ \beta_{12} EI_i + \varepsilon_i \quad \text{E.7}$$

where the variables are as defined previously.

To gain deeper insight into PSG and distinguish major differences between the four groups of economic advances, the PSG performances of the four groups are compared. Recall that the groups are low-income economies, or G1; low- and middle-income economies, or G2; higher-than-average income economies, or G3, and high-income economies, or G4. Finally, to further highlight the relation between quality of PSG and economic development, a relative measure called comparability ratio is computed:

$$QG/ED = PSGscore/pcGDP \quad \text{E.8}$$

RESULTS

Table 2 shows the model summary for regression E.5, where the pcGDP logarithm (log(pcGDP)) is set as the dependent variable and the overall regression model is significant at the 0.000 level. It also shows that a significant proportion of the variability of countries' pcGDP can be explained by the quality of their PSGscore, as indicated by the R of .526 and the Adjusted R Square of .272, showing a very good fit for the model in an environment of extreme significance.

TABLE 2
MODEL SUMMARY: $\log(pcGDP_i) = \alpha + \beta PSGscore_i + \varepsilon_I$

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.526a	.277	.272	.73415

Table 3 presents the explanatory power and significance of the PSGscore as an independent variable, and as expected, the PSGscore has a negative sign. Indeed, the higher the PSGscore, the worse the country's PSG. With a negative score, as expected, the standardized beta coefficient of -.526 for the PSGscore explains 52.6% of the movement of the pcGDP. At p=0.000, the PSGscore is therefore highly significant in explaining the relation between governance scores and country development, as expressed by per capita gross domestic product.

TABLE 3
COEFFICIENTS [a].log(pcGDP$_i$) = α + βPSGscore $_I$ +ε_I

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std Error	Beta		
1	Ln(pcGDP)	5.372	.170		31.677	.000
	PSGScore	-.019	.002	-.526	-8.155	.000

Although these qualitative results attest the robustness of the empirical model, the PSGscore is like a box that contains a number of individual components. Multiple regression 6 is therefore run to explore the individual impact of each PSG component on economic development and the fight against poverty. Indeed, although components of the PSGscore are expected to be 100% correlated to the score, the impact of each component on pcGDP may not be of the same magnitude. Table 4 gives the model summary for regression 6.

TABLE 4
MODEL SUMMARY (E.6)

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.652a	.425	.382	.67635

a Predictor: (Constant). Group Grievance, Uneven Economic Development, Human Rights and Rule of Law, Refugees and Internally Displaced Persons, Human Flight and Brain Drain, Economic Decline, Factionalized Elites, Security Apparatus, Demographic Pressures, State Legitimacy, Public Services

We can see from Table 4 that regression E.6 is highly significant with an R of .652, and that the 12 individual components of PSG explain 42.50% of the behaviour of the pcGDP, with high significance (p=.000). Individually, components of public governance explain the behaviour of pcGDP better than the overall score does. Table 5 shows the impact on development of individual components, although the way in which they are measured is not stated in the Fund for Peace's FSI publications. As expected, the coefficients' signs are negative and significant, except for Security Apparatus, Group Grievance and Economic Inequality.

TABLE 5
INDIVIDUAL COMPONENT COEFFICIENTS[a] (REGRESSION E.6)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.360	.236		22.673	.000
	Security Apparatus	.051	.054	.137	.943	.347
	Factionalized Elites	-.020	.057	-.056	-.352	.725
	Group Grievance	.037	.045	.088	.821	.413
	Economy	-.142	.054	-.322	-2.617	.010
	Economic Decline	.002	.059	.005	.033	.974
	Human Flight and Brain Drain	-.018	.047	-.045	-.389	.698
	State Legitimacy	.086	.067	.260	1.279	.203
	Public Services	-.048	.072	-.149	-.660	.510
	Human Rights	-.016	.059	-.049	-.277	.782
	Demographic Pressures	-.049	.065	-.142	-.752	.453
	Refugees and IDPs	-.049	.039	-.134	-1.256	.211
	External Intervention	-.072	.045	-.213	-1.594	.113

a Dependent Variable: log(pcGDP)

Some components of PSG may, however, be highly correlated and threaten the validity of regression 6. To clarify, Pearson's correlation coefficients for all independent variables were calculated and, in fact, show high degrees of correlation between the 12 components of the PSGscore, with barely any absence of correlation observed, while correlations are significant at the 0.01 level (2-tailed).

To ascertain that the observed relation between the PSGscore, with its 12-component dimension, and economic development is real (given the high level of correlation between variables), we **use four steps to regress the 12 components of PSG, removing those that are not important.**[8] **Results are given in** Table 6. Three of the 12 PSG components are identified as essential to PSG, namely Public Services, Human Flight and Brain Drain, and Demographic Pressures. These three components account for **83.0% of the behaviour of the pcGDP (R of .830), and they explain 68.30% of this behaviour (adjusted R square of .683).**

TABLE 6
MODEL SUMMARY: STEPWISE LINEAR REGRESSION (E.7)

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
4	.642a	.412	.398	.66771

a Predictor: (Constant), VAR00006 Economic Decline, VAR00012 Demographic Pressures, VAR00009 State Legitimacy, VAR00014 External

Table 7 provides greater insight into the impacting components of PSG, and we can for instance write:[9] log ($pcGDP_i$) = 5.466 + (-.161) Economic Decline + (-.093) Demographic Pressures + (.086) State Legitimacy + (-.083) External Intervention. All the relations between the three components of PSG, selected by the **stepwise linear regression** model, are highly significant, given the level of Sig (p=.000).

TABLE 7
COEFFICIENTS [a], STEPWISE LINEAR REGRESSION (E.7)

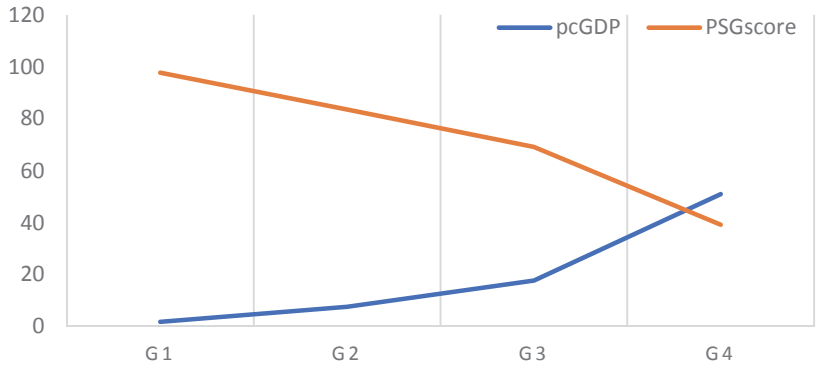
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std Error	Beta		
4	(Constant)	5.466	.159		34.477	.000
	Economic Decline	-.161	.050	-.365	-3.215	.002
	Demographic Pressures	-.093	.035	-.269	-2.652	.009
	State Legitimacy	.086	.030	.262	2.905	.004
	External Intervention	-.083	.038	-.245	-2.176	.031

a Dependent Variable: log(pcGDP)

In regression E.7, components of PSG are expressed in different units or scales; Public Services, for instance, is expressed in terms of quality of health care, education, etc., while the Flight and Brain Drain component is expressed as the level of interest the country has for human displacement and its consequences for the country's development. To escape this methodological problem, we focus on standardized beta coefficients, allowing the **relative importance** of each coefficient in the regression model to be compared. Economic Decline, Demographic Pressures, State Legitimacy and External Intervention are the four components that seem to best describe the causes of development failure. Economic Decline, with a standardized beta of -.365, explains 36.5% of underdevelopment; Demographic Pressures, with a standardized beta of -.269, 26.9%; State Legitimacy, with a standardized beta of .262, 26.2%; and External Intervention, with a standardized beta of -.245, 24.5%. Empirical results seem to confirm the common international perception of poor and underdeveloped countries widely encountered in the literature.[10]

Figure 3 delves further into PSG by comparing the four groups of economic progress, i.e. G1, G2, G3, and G4**.** Depicting the overall relation between PSGscore and pcGDP,[11] it shows that the higher the country's PSGscore, the lower its economic development. G1 countries on average have the lowest pcGDP ($1,759.26) and the highest PSGscore (97.73 on a scale of 114 where 1 represents the highest level of PSG and 114 the lowest). At the other extreme, G4 countries record the highest average pcGDP ($5,0970.73) and the lowest PSGscore (39.21). G2 and G3 countries follow the same trend, with respective pcGDPs of $7,554.55 and $17,690.57 and PSGscores of 83.57 and 69.12. G3's pcGDP is $33,280.17 less than G4's, while its PSG is 29.91 points higher; G1's pcGDP is $49,211.47 less than G4's, while its PSGscore is 58.52 out of 114; and G2 countries' pcGDP is $43,416.19 less than G4's. Here again, recall that the higher the PSGscore, the worse the country's public governance.

FIGURE 3
COMPARATIVE ANALYSIS



Although the wealthy countries in G4 have a PSGscore as high as 39.21, their performance is far from perfect and could be improved. They should enhance their economies even more, not least because economic development goes hand in hand with quality of governance, as expressed by their PSG. This relationship dramatically improves with G3 (countries with higher-than-average incomes). Although the pcGDP of poor G1 countries is less than 3.5% of the pcGDP of all countries, their PSG is 249% weaker. The pcGDP of the low- and middle-income economy G2 countries is 14.8% of the pcGDP of all countries, and their PSG is 213% weaker. Finally, the pcGDP of higher-than-average income countries in G3 is 34.7% of the pcGDP of all countries, while their PSG is 176% weaker.

The relation between quality of PSG and economic development becomes even more apparent when the ratio of quality of governance to economic development (QG/ED) is computed (QG/ED = PSGscore/pcGDP). Figure 4 presents the values of this ratio for each group of countries, indicating results of 1 for G4, 5.07 for G3, 34.7 for G2 and 71.14 for G1.

FIGURE 4
PSGSCORE/PCGDP FOR G1, G2, AND G4

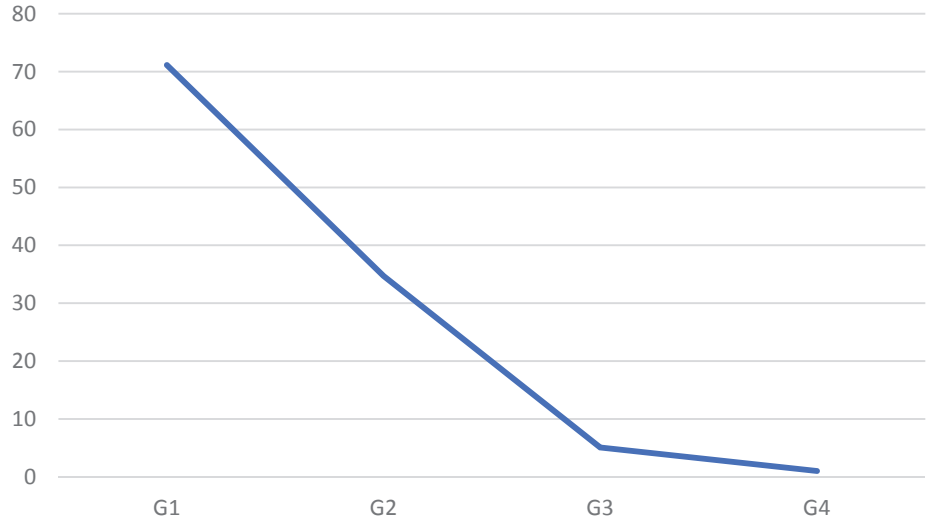


Figure 4 shows how the deficit in PSG increases with economic decline, a dramatic conclusion confirmed by almost each of the 12 individual components of PSG. As shown in Table 8, consisting of the division of each group's individual score by the corresponding score for G4, G1's Security Apparatus score, for instance, divided by G4's Security Apparatus score, is 2.67 (Table 8, line 2, column 2); G2's is 2.39; G3's, 2.13; and G4's, divided by its own Security Apparatus score, is 1.

TABLE 8
COMPARISON OF INDIVIDUAL SOCIAL PUBLIC GOVERNANCE ACROSS COUNTRY GROUPINGS

	Security Apparatus	Factionalized Elites	Group Grievance	Economy	Economic Decline	Human Flight and Brain Drain	State Legitimacy	Public Services	Human Rights	Demographic Pressures	Refugees and IDPs	External Intervention
G1/G4	2.67	2.06	1.48	2.29	2.59	2.76	2.45	4.35	2.36	3.17	2.25	2.95
G2/G4	2.39	1.89	1.47	1.85	2.13	2.55	2.18	3.29	2.12	2.41	1.71	2.58
G3/G4	2.13	1.59	1.33	1.54	1.85	1.97	1.86	2.50	1.82	1.91	1.39	1.91
G4/G4	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 8 shows that G4's governance advantage fades as its economic development increases. G1's scores seem to suffer more in terms of the components of Quality of Public Services, Demographic Pressures, External Intervention and State Legitimacy.

DISCUSSION OF RESULTS

The results highlight the practical importance of effectively managing development through sound public social governance. Our findings present a simplified picture of economies that have failed to escape the grasp of poverty and underdevelopment. These are economies in decline, where living conditions as a whole are deteriorating due to lack of appropriate and fair public policies, leading to extreme public debt, high unemployment, high inflation, weakening productivity, and increasing business failures. In these countries, public policies lead to uneven regional economic development, enhancing structural inequality based on groups, such as racial, ethnic, religious or other identity groups. These nations experience debilitating demographic pressures such as inadequate food supply and access to safe water and other life-sustaining resources, and the resulting health effects. Given these conditions, the State Legitimacy component is at stake especially regarding the government's representativeness and openness and its relationship with the citizenry. Lastly, these are the countries where operations are affected by the influence and impact of external actors.

Above all, these nations are unable to set for themselves or for their citizens clear and well-defined development objectives likely to harness national energies in the fight against poverty and the push for

development. Such failure decisively impacts all other constraints, as basic state functions, which are supposed to serve the people, are weak or inexistent and the delivery of essential services, such as health, education, water and sanitation, transport infrastructures, electric power, and the internet and connectivity, are inadequate. Information and statistical tools are neglected (often for political reasons) for fear of them being used to criticize the government's performance (World Bank, 2017).

Further, these nations are unable to provide citizens with the necessary conditions for freedom of entrepreneurship; indeed, no amount of money can lead to development if citizens are not involved in the effort and there is no process of equitable interaction with the people. For this interaction to exist, the following conditions must be in place: first, there must be an institutional context that ensures fairness, safeguards revenue and reduces fiscal inequities and volatility; and second, macroeconomic environments must be established that are conducive to long-term investment (World Bank, 2017). These conditions mean that the government is capable of promoting and enforcing sound laws and regulations and can ensure that a law or any other formal rule is likely to be promulgated[12] despite the opposition of privileged groups among its citizens. Such a government is therefore able to prevent a small number of powerful groups, often with strong ties to former colonial powers, from maintaining, for their sole benefit, exclusive control over national economic activities and resources.[13] Although limited in number, such groups usually have well-organized family networks of professionals, lawyers, accountants, notaries and even medical doctors and private clinics, and members often hold multiple citizenships. They are related to each other not just through blood but also through subtle and informal connections, allowing them to maintain their iron grip on all sectors of the economy in a way that no development project can break through. Their cooperation is obtained in exchange for royalty disbursements, and they exercise a monopoly on various activities.

The dominance of privileged groups results in the country being unable to value skills and knowledge for their real worth. Indeed, in many developing countries, individual and family relationships often overshadow skills and competencies. Consequently, national income can only be increased through informal and transaction-oriented methods, and government supporters are rewarded by being allowed to violate more national laws or letting others violate them (World Bank, 2017). As expected, these conditions inevitably leave the door wide open to all kinds of corruption and they inspire creative ways to increase it. Development efforts in such environments cannot be expected to generate economic growth as they may lead to the increased likelihood of stimulating rent-seeking behaviour by politically well-connected individuals and groups (Roberts, 2010).

What follows is a despoiling of national resources, whether natural, human or intellectual. Education systems and educated citizens, for instance, are neglected or misused as resources, preventing the country from taking advantage of the major modern technological breakthroughs that most countries enjoy. The country is then more than ever unaware that scientific methods and technologies can be used to lay the foundation for development and lead to progress and sustainability. Such negative governance portraits of poor and underdeveloped countries are often exacerbated by intense demographic pressure from the population itself or the surrounding environment, making access to food and the necessities of life extremely difficult. Consequently, the impact of the Human Flight and Brain Drain component cannot be taken into account, nor can the consequences for the country's development. Even poor countries with a respectable PSG score should understand that the effectiveness of development policies depends not only on the policies chosen, but also on how they are selected and implemented. They should also know that policy making and implementation require negotiations between the nation's different actors, to ensure a policy's broad acceptance.

Since most underdeveloped countries are likely to be the largest recipients of Official Development Assistance, some readers may infer that the findings presented here offer additional reasons for condemning such aid. They may believe that official foreign aid can actually impede the receiver country's economic growth (Roberts. J.M., 2010). In fact, needy countries need further help, but of a different nature, where aid is based on knowledge, technology transfer and appropriate training in PSG. PSG can indeed be the key to prosperity, but only if progressively learned and implemented. PSG is important not only for its moral character, but also because it directs national efforts toward a single

objective, namely development. This may explain why some economies advance significantly in their development by implementing only the technical aspect of PSG at first, and then eventually by bargaining for human rights and citizens' freedoms. This process may work for the short term only; over the long term, all aspects of PSG must be respected for development to continue and be sustainable. PSG matters because its absence can hamper individuals' ability to participate in national development, and the performance of tasks required for successful development may thus be impaired.

CONCLUSION

Most underdeveloped economies have sound and possibly legitimate reasons to believe that the persistent failures of their development initiatives are the direct consequence of the negative historic legacy of colonialism. Although they may feel the effects of this legacy, in addition to those associated with inheriting undeveloped local conditions, this state of being is actually exacerbated by the current unfair international exchange system. Be that as it may, these nations are not absolved from their responsibility for their persistent lag in development. The analysis presented here shows that more than any other proposed measure or reason, PSG can have a decisive impact on the progress of development. Weak PSG may frighten away investors, discourage innovation, and erode trade. Strong PSG is vital to development and social wellbeing, and by sustaining a successful market, it may attract new economic activities, improve social conditions and ultimately promote progress. Weak PSG kills development initiatives, prevents development spending from generating any sustained prosperity, and cancels economic multipliers because of economic inertia resulting from an inefficient government's corrupt practices and stagnant labour markets (Segerfeldt, 2009).

PSG policies, even when well intended, can also have disastrous short-term consequences, particularly when not adapted to country-specific conditions and when not progressively achieved. In the best-case scenario, the development efforts of poor and developing countries will still fail to compensate for the inadequacy of their PSG. Concerning this issue, developing countries are far from being blameless: their duty toward development remains unchanged, and they must understand that their development initiatives will never be credible or effective unless they make a strong commitment and take a stand for development through a sound PSG. Economic "conditionalities" that are (or might be) suggested/imposed on developing countries as part of international development assistance may work for some countries only, i.e. those with appropriate PSG.

The empirical evidence brought forward here highlights that escaping poverty and underdevelopment might finally come down to a question of efficient management of national wealth within an international environment characterized by unfairness, fierce competition and damaging artificial constraints. Lastly, the expression *Heaven helps those who help themselves* can best sum up the findings presented here.

ENDNOTES

1. Although in some environments development may be so selective that a large proportion of the population is excluded.
2. In 1982, the world population was 3.531 billion individuals; by 2012, it had soared to 7.81 billion.
3. World Development Indicators Databank for poverty data (World Bank).
4. Countries missing from the sample include Burma, Dominica, Grenada, Kiribati, Libya, Macau, Saint Lucia, Saint Vincent and the Grenadines, South Sudan, Syria, Tonga, Vanuatu and Yemen.
5. The World Factbook provides information on the history, people, governments, economy, geography, communications, transportation, military and transnational issues of 267 world entities.
6. http://fundforpeace.org/fsi/data/
7. Stepwise regression essentially does multiple regressions a number of times, each time removing the weakest correlated variable.
8. See footnote 7.
9. The "B" values are the coefficients for each variable; this is the value by which the variable's data should be multiplied in the final linear equation to predict the pcGDP.

10. World Bank (2017).
11. The pcGDP is expressed in $ rather than its log value. This allows for greater understanding of the relation between economic development and quality of public social governance.
12. It appears that in some countries, laws and regulations are promulgated not to be respected, but rather as punitive discriminatory leverage against clients.
13. The only external intrusion into family circles is by marriage. Consequently, any marriage proposal is the subject of a family vote and seen as investment project.

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APPENDIX

SAMPLE

COUNTRY	COUNTRY	COUNTRY	COUNTRY	COUNTRY
Afghanistan	China	Haiti	Mexico	Sierra Leone
Albania	Colombia	Hong Kong	Micronesia	Singapore
Algeria	Comoros	Honduras	Moldova	Slovak Republic
Antigua and Barbuda	Democratic Republic of Congo	Hungary	Mongolia	Slovenia
Angola	Republic of the Congo	Iceland	Montenegro	Solomon Islands
Argentina	Costa Rica	India	Morocco	Somalia
Armenia	Cote d'Ivoire	Indonesia	Mozambique	South Africa
Australia	Croatia	Iran	Namibia	South Korea
Austria	Cuba	Ireland	Nepal	Spain
Azerbaijan	Cyprus	Israel and West Bank	Netherlands	Sri Lanka
Bahamas	Czech Republic	Italy	New Zealand	Sudan
Bahrain	Denmark	Jamaica	Nicaragua	Suriname
Bangladesh	Djibouti	Japan	Niger	Swaziland
Barbados	Dominican Republic	Jordan	Nigeria	Sweden
Belarus	Ecuador	Kazakhstan	North Korea	Taiwan
Belgium	Egypt	Kenya	Norway	Switzerland
Belize	El Salvador	Kuwait	Oman	Tajikistan
Benin	Equatorial Guinea	Kyrgyz Republic	Pakistan	Tanzania
Bhutan	Eritrea	Laos	Panama	Thailand
Bolivia	Estonia	Latvia	Papua New Guinea	Timor-Leste
Bosnia and Herzegovina	Ethiopia	Lebanon	Paraguay	Togo
Botswana	Fiji	Lesotho	Peru	Trinidad and Tobago
Brazil	Finland	Liberia	Philippines	Tunisia
Brunei Darussalam	France	Lithuania	Poland	Turkey
Bulgaria	Gabon	Luxembourg	Portugal	Turkmenistan
Burma	Gambia	Macedonia	Qatar	Uganda
Burkina Faso	Georgia	Madagascar	Romania	Ukraine
Burundi	Germany	Malawi	Russia	United Arab Emirates
Cambodia	Ghana	Malaysia	Rwanda	United Kingdom
Cameroon	Greece	Maldives	Samoa	United States
Canada	Grenada	Mali	Sao Tome and Principe	Uruguay
Cape Verde	Guatemala	Malta	Saudi Arabia	Uzbekistan
Central African Republic	Guinea	Mauritania	Senegal	Venezuela
Chad	Guinea Bissau	Myanmar	Serbia	Vietnam
Chile	Guyana	Mauritius	Seychelles	Zambia
				Zimbabwe
35	35	35	35	36