

# What Typologies of Governance for Sub-Saharan African (SSA) Countries?

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**Abstract:** *The objective of this paper is to characterize the typologies of governance in Sub-Saharan Africa (SSA) in order to engineer policy options with respect to the type of governance. By combining data from global governance indicators on the one hand (WGI, 2017) and the International Country Risk Guide (ICRG, 2015) and on the other hand from development indicators (WDI, 2017), we establish a hierarchical ascending classification (AHC) that reveals four blocks of countries with strong governance similarities for each block: political for block 1, economic for block 2, social for block 3 and mixed for group 4.*

**Keywords:** Governance, typologies, AHC and SSA

## 1. Introduction

Since North's pioneer work in the 1990s and expanded in the early 2000s with the work of Acemoglu, Johnson and Robinson (2001), the role of institutions and institutional change in the development process has crystallized debates on development. This interest is so important that the international institutions - globally the major actors of globalization - have made it their main concern, even going so far as to condition access to concessional loans on the application of institutional reforms.

However, in the majority of studies, the aim is to see how political, economic and institutional governance can explain the success or failure of development policies. This is especially true because today, many international development assistance agencies subscribe to evidence-based policies and decision-making rules and condition their contribution to satisfactory governance outcomes. Hence the need not to neglect the monitoring of any governance indicator and, above all, to direct governance policies towards carefully targeted sectors where the effect of the policy will be very perceptible.

Governance is then used in a normative way by donors to international funds to designate institutions, practices and the political norms necessary for growth and the economic development of borrowing countries (Montasar and Makram, 2013). It is considered the way by which authority is exercised in the management of resources economic and social development of a country in the service of the development (World Bank, 1998). The set of institutional reforms recommended alongside neo-liberal economic programmes, have been promoted to make these programs more effective, not for the social and political considerations on the economy. The focus is no longer on the techniques of preparation of the development plans, but on the nature of the political systems in place and the logic of their functioning, sources of corruption, injustice and of inequality.

UNDP (2008) defines governance as the exercise of economic, political and administrative authority to manage

the affairs of the country at all levels. It then encompasses the mechanisms, processes, and institutions through which citizens and groups express their interests, exercise their legal rights, meet their obligations, and to which they refer to resolve their disputes. Accordingly, UNDP recognizes that governance has three essential dimensions: The political, economic and administrative dimension (UNDP 2008). However, should good governance be systematically linked to the simultaneous achievement of these three dimensions?

The existing literature uses a wide range of indicators, depending on the work and authors, to capture the quality of institutions or the quality of governance in a country. These include the protection of property rights (Knack and Keefer, 1995), the risk of expropriation (Acemoglu et al., 2001), political instability (Scully, 1988; Fosu, 1992; Olson, 1996), corruption (Mauro, 1995), and democracy (Barro, 1996). However, despite all these indicators, certain aspects of governance remain ignored, particularly when it comes to assessing the role of the quality of governance in shaping economic growth (Chatti, 2010). This observation raises an essential question which consists in asking whether all these efforts in terms of the orientation of governance act in the same way whatever the country under consideration, particularly in Sub-Saharan Africa. This questioning leads us to the objective of this study, which is to characterize the types of governance existing in Sub-Saharan Africa (SSA) that are necessary to improve growth in SSA countries. In order to achieve this objective, we will address the issue using a typological analysis based on the Hierarchical Ascending Classification (HAC) applied to data from governance indicators on the one hand World Development Indicators (WGI, 2017) and International Country Risk Guide (ICRG, 2015) and development indicators on the other hand (WDI, 2017).

To this end, the remainder of this paper will be organized as follows: the first section will highlight the foundations of a typological analysis of governance. The second section will present the methodology used to arrive at the results presented in the third section and finally the fourth section will be the subject of the conclusion.

## 2. Foundations of a Typological Analysis of Governance

### 2.1 Governance from the perspective of international institutions

According to the IMF, good governance refers to the proper conduct of public affairs and consists of a strong fight against corruption, greater transparency in economic policy decisions on public finances and the standardization of control practices. For the UN, governance is the capacity of the state to serve the interests of citizens, to manage public functions and resources, but it is also about how authority is exercised, as defined by the European Commission (2003). Governance is thus presented as the traditions and institutions by which authority is exercised in a country. The UNDP (United Nations Development Programme) was among the first international institutions to speak of democratic governance, thus integrating the political dimension at the heart of its definition from the outset.

In another sense, and based on the World Bank's definition, the UN considers that governance is the process by which those in power are chosen, monitored (controlled) and replaced. Governance refers to the government's ability to put in place sound policies to manage resources effectively. Finally, governance is about respect for the state and citizens, the institutions that govern economic and social interactions.

The UNDP (1997) proposes a definition that is both inclusive and precise. It defines governance as the exercise of political, economic and social authority and administration in the management of a country's affairs at all levels. Governance is an objective concept that includes mechanisms, processes, mechanisms, procedures, and complex relationships and institutions through which citizens and groups articulate their interests, exercise their rights and meet their obligations, and through which they seek resolution of their disputes. In addition, UNDP has identified the three levels of governance: the state, which creates an enabling political and legal environment; the private sector, which generates jobs and income; and civil society, which facilitates political and social interactions.

Despite the lack of a common understanding of the concept of governance, the set of definitions adopted by these institutions converges towards a point which is to link the concept of governance to a certain efficiency of the State in the management of public affairs. However, these definitions mainly bring out three essential dimensions that encompass the concept of good governance, namely the institutional dimension, the economic dimension and the social dimension.

### 2.2 Theoretical Framework

As early as the 18th century, Adam Smith stressed the importance of institutional quality in explaining a country's economic performance. Since the 1980s and 1990s, institutional economics has been at the centre of debate following a series of studies (Olsson, 1982; Scully, 1988; North, 1990; Barro, 1996; Landes, 1998; ...). These authors

show that the availability and productivity of resources used in productive processes are influenced by political decisions and by the institutional environment in general. This approach goes beyond Solow's (1956) model, according to which long-term growth can be explained by technical progress, but that progress is external to political, economic and social structures.

However, Williamson's use of the term "neo-institution", at the same time, acts as a demarcation between the old American institutional school considered to be anti-theoretical (Coase, 1998), and the designation of the grouping of theoretical currents that maintain that institutions are indispensable to the understanding of economic phenomena.

The idea that institutions can, subject to adjustment, be analyzed with the instruments of standard economic theory is already present in Williamson (1975). Moreover, it is clear that his work is based on an analysis of the comparative effectiveness of organizations with respect to the need to minimize transactions costs. While it is apparent that this notion creates confusion between the notions of institution and organization, it clearly does not lend itself to the study of the determinants of sustained economic growth.

Reflections on long-term economic growth will be given new impetus by one of the most important players in the New Institutional Economics (NIE): North (1990). It is based on neoclassical theory, keeping among others the hypothesis of competition and choice under constraint. However, it stands out by highlighting the fact that it does not take into account the importance of time, institutions, ideas and ideologies, and the political process vis-à-vis the economy.

### 2.3 Interactions between governance and economy

North (1994), defines institutions as the "rules of the game", in a context where organizations and entrepreneurs are the players. He derives this definition from the fact that he considers that "institutions are the constraints established by humans that structure human interactions. They consist of formal constraints (such as rules, laws, constitutions), informal constraints (such as behavioural norms, self-imposed codes of conduct) and the characteristics of their applications".

It follows from his perceptions of governance that the relationship between organisations and institutions depends on the institutional framework on the quality of the organisations created and their evolution. Thus, if the institutional environment rewards crime, for example, criminal organizations will be created. That is to say, the effect of institutions on macroeconomic performance in the medium to long term is through incentives. North (1990) then considers that the level of a nation's long-term economic growth is determined by the interaction between the set of formal and informal rules that are specific to it, hence the need to categorize the types of governance according to the historical path followed in favour of capital accumulation and growth. In this way, it departs from the neoclassical understanding that institutional governance is

the effective solution to economic problems. For he believes that "institutions are not necessarily or even usually created to be socially efficient; rather, they are created (at least as far as formal rules are concerned) to serve the interests of those who hold the bargaining power to create new rules" (North, 1990).

In view of the above, one has the impression that the theory of "public choice" is reappearing here. However, this theory ignores informal institutions. Whereas a historical look reveals that ideas, ideologies, myths, dogmas and prejudices are decisive (North, 1990). They help to capture institutions as "classes of shared mental models", and the evolution of these mental models is a source of institutional change. Institutional change is capable of promoting the growth of an economy. But it is a long and gradual process, often due to the fact that organizations born of the incentive of the institutional framework, wanting to evolve, end up changing the institutional environment within which they operate.

## 2.4 Institutional change and long-term growth

Variations in growth rates from one economy to another can therefore ultimately be explained by the different forms of institutional change taking place in those economies. Indeed, institutional change is a long, gradual and progressive process, but this is more relevant to informal rules. In reality, formal rules can be changed quickly and spontaneously, possibly through wars, revolutions, conquests and even natural disasters. However, the effectiveness of such institutional change is questionable. It is therefore understandable that some revolutions have not had the desired effect on the institutional environment. To the extent that the imitation, transfer or adoption of formal rules (political and economic), which have produced spectacular economic results in Western economies, have not been sufficient to reproduce the same effects in Third World economies. That is to say, informal rules make a difference over time through their embedding; they are inextricably linked to customs, traditions and mores inherited from past generations.

A country's economic performance is therefore influenced by the type of governance. Thus, once the path of growth is initiated by an economy, it tends to be consolidated and reinforced by the historical conditions that accompany network externalities, by the learning process of organizations and by the subjective modifications of individuals. The idea that differences in growth between countries can be partly explained by factors other than economic variables has been contributed by other authors such as North, Clague, Keefer and Oison (1996), who opted for the respect of property rights, Barro (1996), who rebounded by justifying, on the basis of democracy, the differences that Alesia and Perotti (1994) attributed to political instability, and Rodrik (1999), who later attributed to governance.

According to endogenous growth theory, several factors like governance can contribute to growth. The analysis of the governance typology therefore seems more apt to describe the realities of economic growth in SSA, as it is not uncommon to observe that countries with high levels of

international aid and high natural resource endowments are the nations with the lowest growth rates (Gylfason, 2001; Sachs and Warner, 1995 and 2001; McKay, 2012; Feulefack, 2011). As a result, there is a suspicion about the typology of governance in SSA countries. In this respect, one may naively wonder whether wars, famine and corruption do not guide the type of governance to be applied and therefore absorb the other factors of growth? The interaction between institutions and growth, which according to North conditions economic success, can also lead to the question whether it is the type of institutions in SSA countries that determines the concentration of activities in mining enclaves. It thus seems to be accepted that whatever the country, the search for the determinants of long-term growth cannot be done without taking into account the influence of the institutional framework.

Another aspect that requires special attention, and which partly justifies the determinants of growth, lies in the type of governance practiced. For, if we start from the premise that the effect of governance on growth could depend on the type of governance applied, depending on whether it has a strong multiplier effect (economic governance) or not, the orientations of institutional policy could thus indirectly influence the quality of growth.

Recently, institutional quality has been introduced into the analysis of the determinants of growth quality. It is increasingly used to justify differences in economic performance across countries. This view is supported by the theory of institutional adaptation (Wilhelms and Witter, 1998), which considers that a country's ability to activate, monitor and preserve the quality of its growth depends on the typology of institutions within it.

## 3. Methodology of Typological Analysis

Here, the typology of governance in sub-Saharan Africa over the period from 1984 to 2014 is discussed. In order to do this, we will first present the data and their sources and then present the method of typological analysis based on the Ascending Hierarchical Classification (AHC).

### 3.1 Data and sources

We use data from secondary sources, derived for institutional variables from the World Governance Indicators (WGI) and the International Risk Country Guide (IRCG) and for development variables from the World Development Indicators (WDI). Our analyses cover 29 SSA countries, observed at five-year intervals over the period 1984 to 2014. The choice of the number of countries, the countries in question and the study period was conditioned by the availability of data.

However, it should be noted that the choice of a given indicator should take into account two essential elements: the distinction between perception-based (subjective) and objective indicators on the one hand, and on the other hand, the distinction between individual indicators and composite or aggregate indicators.

### 3.1.1 Presentation of the variables of the International Country Risk Guide (ICRG)

The International Country Risk Guide (ICRG) includes 22 variables divided into three sub-categories of risk: political, financial and economic risk. A separate index is created for each of the sub-categories. The political risk index is the most important and is based on 100 points, the financial risk on 50 points and the economic risk on 50 points. The sum of the points of the three indices is divided by two to produce the weights to be included in the country's composite risk score. The composite scores, ranging from zero to 100, are then broken down into categories ranging from very low risk (80 to 100 points) to very high risk (zero to 49.9 points). The political risk score includes 12 weighted variables covering both political and social attributes. The ICRG advises users on how to tailor both the data and the weights to focus the assessment on the needs of the investing firm.

Projections of future conditions are framed in "best" cases and "worst" scenarios. This gives managers a probabilistic future in which they can make judgments about risk management or insurance needs. Our work is limited to the presentation of governance or policy risks. To do this, the risk weighting components and risk sequences shown in the following table are used to produce the political risk rating :

**Table 1: Political governance variables**

Political Risk Components		
Sequences	Components	Points (max)
STA	Government stability	12
CSE	Socio-Economic Conditions	12
PINV	Investment Profile	12
COIN	Internal Conflicts	12
COEX	External Conflicts	12
CORR	Corruption	12
POMI	Militarization of power	6
TERE	Religious tension	6
ETA	Law and Order	6
TEEH	Ethnic tensions	6
DEMO	Democratic Accountability	6
QABU	Quality bureaucracy	4
Total 100		

### 3.1.2 Presentation of the World Governance Indicators (WGI)

The World Bank is a pioneer in the popularization of governance indicators. Daniel Kaufmann's team, since the publication of Governance Matters, has enriched its database by making it the most complete and, above all, the most widely used in this field.

These are composite indicators par excellence, as they aggregate a considerable number of other indicators. Moreover, they are the most widely used indicators in development economics, as the World Bank is still at the forefront of research in this discipline. As a result, these indicators are recognized for the rigor with which they are constructed.

The WGI's six composite sub-indicators have values between -2.5 and 2.5 and are used to reflect the definition of the six aspects of governance that it embodies. Here we

highlight the three dimensions of the said definition associated with the three pairs of proposed subindicators:

- 1) The process by which governments are selected, assessed and replaced measured here by the indicators: – Voice and accountability; – Political stability.
- 2) The capacity of government to effectively formulate and implement appropriate policies as measured here by the indicators:
  - Government effectiveness; – Quality of regulation.
- 3) The respect of citizens and the State for the institutions that govern economic and social interactions as measured here by the indicators: Government Effectiveness; Regulatory Quality:
  - Rule of law;
  - Control of corruption.

### 3.2 Method of analysis

The methodology we will use here to analyze our data is one based on a typological analysis of the data. Our typological analysis here will be done using the Ascending Hierarchical Classification (AHC) method because our variables are quantitative and moreover, they aim to structure and simplify the data from several variables, without favouring any one of them in particular. The main objective of classification is to constitute or construct classes, groups or categories of items (individuals or variables) that have common traits within groups and that differ between groups. In other words, the aim is to create homogeneous classes that are as far apart as possible.

#### 3.2.1 Forms and types of data

The starting data are organized as a matrix  $X$  having  $I$  rows ( $I = \{1...I\}$ ) and  $K$  columns  $K = \{1...K\}$ . The objective is to produce a tree structure that highlights the hierarchical links between individuals or groups of individuals. The data used in the case of a classification can be qualitative, quantitative or from contingency tables, or binary from logic tables. In order to deal with all these types of variables, it is the measure of similarity that must be adopted according to the type of data. Indeed, a measure of similarity between individuals can be a distance (Euclidean distance) or an index (similarity index). For similarity between two groups of individuals, several criteria are also used, including the minimum jump or simple link criterion (smaller distance), the complete link criterion (greater distance) and Ward's criterion (1963).

#### 3.2.2 Aggregation method: Inertia aggregation or Ward's criterion

The idea in this method is to associate individuals or groups of individuals by maximizing inter-class inertia and minimizing intra-class inertia (or variability). This criterion is based on the principle of the Huygens decomposition formula. Thus, the total inertia of the  $N_i$  Cloud of a variable  $X$  is given according to Huygens' theorem by the sum of the intraclass inertia and the interclass inertia. If we consider  $\bar{X}$  as the mean of  $X$ ,  $\bar{X}_q$  as the mean of  $X$  in class  $q$ , then:

$$I_{total} = I_{intra} + I_{inter} \quad (1)$$

With:

- Total inertia given by:

$$I_{total} = \sum_{q=1}^Q \sum_{i=1}^I (X_{iq} - \bar{X})^2$$

- Intra-class inertia given by the variability between classes:

$$I_{intra} = \sum_{q=1}^Q \sum_{i=1}^I (X_{iq} - \bar{X}_q)^2$$

- Inter-class inertia given by the variability within a class:

$$I_{inter} = \sum_{q=1}^Q \sum_{i=1}^I (\bar{X}_q - \bar{X})^2$$

Knowing that the total inertia is constant, it will be question for us to play either on the intra-class inertia by minimizing it, or on the inter-class inertia by maximizing it. In reality these two methods return to only one because the total inertia which is a constant, is the sum of the intra-class inertia and the inter-class inertia. Since the total inertia is constant, minimizing the intra-class inertia automatically amounts to maximizing the inter-class inertia. In the end, we will say that a partition is good if the two following conditions are verified:

- Individuals in the same class are very close, i.e. the intra-class variability is small.
- Individuals of two different classes are very distant, i.e. the inter-class variability is high.

By considering only one criterion (minimizing or maximizing), we rely on the index of the quality of the partition between 0 and 1 and measured by the ratio between inter-class inertia

and Total inertia ( $0 \leq \frac{Inertia_{inter}}{Inertia_{total}} \leq 1$ ).

If  $\frac{Inertia_{inter}}{Inertia_{total}} = 0$ , it means that the group

averages are all the same, and  $Inertia_{total}$

equal to the total average. Therefore this index value does not allow us to classify because all classes have the same averages.

If  $\frac{Inertia_{inter}}{Inertia_{total}} = 1$ , it means that the intra-class

inertia is equal to 0. So inside  $Inertia_{total}$

of a class, the individuals are very identical and therefore the classes are very homogeneous. This index value is therefore ideal for classification.

This index has one major limitation. The fact that it depends on the number of individuals and the number of classes. Because the higher the number of classes, the better the groups are homogeneous and vice versa.

To overcome this limitation, Ward assumes that a class is equal to an individual. This implies that within the class there is no intra-class variability and therefore inter-class inertia is equal to one. Thus, the partition is ideal. The objective of Ward's criterion is therefore to choose two classes  $a$  and  $b$  such that their aggregation minimizes the decrease in interclass inertia. Indeed the interclass inertia can only decrease when two groups are aggregated. Indeed if we consider each time two classes  $a$  and  $b$ , this will be equivalent to minimizing at each step the following equality:

$$Inertia(a) + Inertia(b) = Inertia(aUb) - \frac{m_a m_b}{m_a + m_b} d^2(a, b)$$

with  $m_a$ , the number of individuals in class  $a$ ,  $m_b$ , the number of individuals in class  $b$  et  $d^2(a, b)$  is the distance between the centre of gravity of class  $a$  and class  $b$ . Since we want this equality to be closest to  $Inertia(a) + Inertia(b) = Inertia(aUb)$ , it will be enough to minimize the next compartment of the relation:

$$\frac{m_a m_b}{m_a + m_b} d^2(a, b)$$

#### 4. Results of the AHC Typology Analysis

The results of the typology analysis presented here are derived from WGI, ICRG data and GDP per capita growth rates for the 29 countries (Angola, Burkina Faso, Côte d'Ivoire, Cameroon, Congo Democratic Republic, Congo Republic, Ethiopia, Gabon, Ghana, Guinea, Gambia, Guinea-Bissau, Kenya, Liberia, Madagascar, Mali, Mozambique, Malawi, Namibia, Niger, Nigeria, Sudan, Senegal, Togo, Tanzania, Uganda, South Africa, Zambia and Zimbabwe) in sub-Saharan Africa in our study sample. To obtain them, we used a dendrogram classification approach based on the Ward (1963) criterion as presented in the methodology in order to establish groups or classes of individuals. Then we used the total inertia provided by each class to define the optimal number of governance typologies appropriate for SSA and finally we used the variables that characterize each group to derive the nomenclature of SSA governance typologies.

##### 4.1 The dendrogram: result of the typological analysis through classification

We present in the graph below the dendrogram highlighting the different governance groups or classes that can be formed from the WGI and ICRG governance databases centered and reduced (normalized) to cancel out the differences in scale between magnitudes or variables.

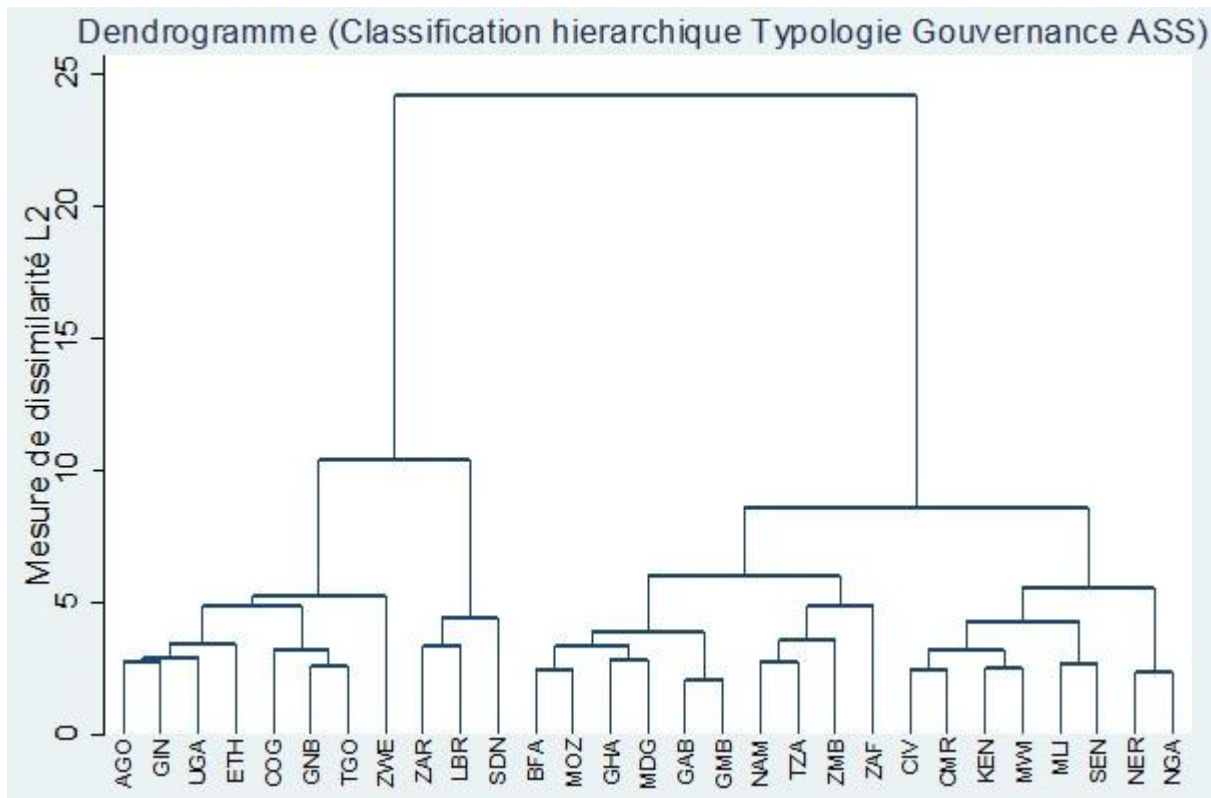


Figure 1: Typology of governance with classification

Looking at the dendrogram, we realize that it highlights several classes or types of governance. However, when we rely on the dissimilarity index between groups, we can establish for the different levels of dissimilarity index ( $I_d$ ), the following classes:

- For a dissimilarity index higher than 11% ( $I_d > 11\%$ ), we can establish two classes or groups. Reading the graph from left to right, the first class consists of 11 countries ranging from Angola (AGO) to Sudan (SDN). The second class consists of 18 countries from Burkina Faso (BFA) to Nigeria (NGA).
- For a dissimilarity index between 9% and 10% ( $9\% \leq I_d \leq 11\%$ ), we can establish three classes or groups. Reading the graph from left to right, the first class consists of 08 countries ranging from Angola (AGO) to Zimbabwe (ZWE). The second class consists of 03 countries and goes from the Democratic Republic of Congo (ZAR) to Sudan (SDN). The third class is made up of 18 countries from Burkina Faso (BFA) to Nigeria (NGA).
- For a dissimilarity index between 7% et 9% ( $7\% \leq I_d < 9\%$ ), we can establish four classes or groups. Similarly, reading the graph from left to right, the first class consists of 08 countries from Angola (AGO) to Zimbabwe (ZWE). The second class is made up of 03 countries from the Democratic Republic of Congo (ZAR) to Sudan (SDN). The third class is made up of 10 countries from Burkina Faso (BFA) to South Africa (ZAF). Finally, the fourth class is made up of 08 countries and goes from Côte d'Ivoire (CIV) to Nigeria (NGA).
- For a dissimilarity index between 5.5% et 7% ( $5.5\% \leq I_d < 7\%$ ), we can establish six classes or groups. Looking at the graph from left to right, the first class consists of 08 countries from Angola (AGO) to Zimbabwe (ZWE). The second class consists of 03 countries from the Democratic Republic of Congo (ZAR) to Sudan (SDN). The third class consists of 06 countries from Burkina Faso (BFA) to the Gambia (GMB). The fourth class consists of 04 countries from Namibia (NAM) to South Africa (ZAF). The fifth class consists of 06 countries ranging from Côte d'Ivoire (CIV) to Senegal (SEN). The sixth and last class consists of 02 countries, Niger (NER) and Nigeria (NGA). A similar reasoning for different levels of dissimilarity indices will make it possible to count different numbers of classes.
- Finally, for a dissimilarity index lower than 2.5% ( $I_d < 2.5\%$ ), we can establish 29 classes or groups. Because at the moment, each class will be made up of a single country and the total of the classes will represent the 29 countries of the study.

With regard to the criterion related to the dissimilarity index ( $I_d$ ), we cannot say with objectivity up to which number of classes or types the classification should be established. It is therefore necessary to use a more objective criterion based on the criterion of class inertia.

#### 4.2 Optimal number of governance types in SSA

Here we use the criterion of total inertia as shown in the graph below. This criterion which in our case is based on the inertia gain brought by the passage from a class number  $n$  to the class number  $n + 1$  to objectively define the number of types of SSA governance over our study period.

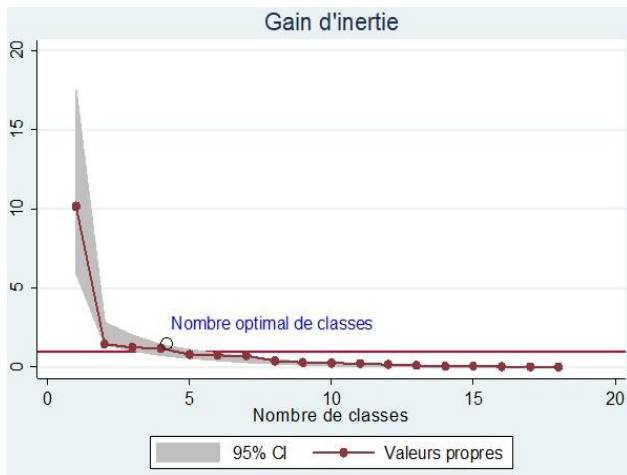


Figure 2: Optimal number of governance types

Reading the graph, we can see that the inter-class inertia loss related to the validation of a class is 10.1649. This is very high. It is therefore advisable to start from two classes to a single class because the idea is to maximize the inter-class inertia. The loss of inertia linked to the validation of two classes is 1.4646499, the loss of inertia linked to the validation of three classes is 1.25271 and finally, the loss linked to the validation of four classes is 1.19932.

All these losses are relatively high as they are all greater than 1, so we do not wish to lose as much inter-class inertia by grouping classes. Moreover, the inertia absorbed by the grouping into four classes captures 78.23% of the total

inertia. Hence, the validation of four governance typologies in SSA allowing us to classify the countries in our study as follows:

**Group 1:** Eight countries make up this first group, namely Angola, Congo, Ethiopia, Guinea, Guinea Bissau, Togo, Uganda and Zimbabwe.

**Group 2:** Three countries make up this group, namely DR Congo, Liberia and Sudan.

**Group 3:** This group consists of ten countries: Burkina Faso, Gabon, Ghana, Gambia, Madagascar, Mozambique, Namibia, Tanzania, South Africa and Zambia.

**Group 4:** Eight countries make up this group: Côte d'Ivoire, Cameroon, Kenya, Mali, Malawi, Niger, Nigeria and Senegal.

To complete our typological analysis, it is important to present the criteria that facilitated the classification.

**4.3 Criteria determining the typologies of governance in SSA**

The table below presents the weights of the variables that contributed to the validation of each of the governance typologies selected.

Table 2: Determinants of governance typologies in SSA

	Type 1		Type 2		Type 3		Type 4	
	Variables	Weight	Variables	Weight	Variables	Weight	Variables	Weight
Variables used as locomotives	First variable							
	Citizen participation	10,60%	Ethnic tensions	7,2%	Political Stability	7,6%	External conflicts	37,4%
	Second variable							
	Militarization of power	9,60%	Internal conflicts	7,1%	Corruption Control	7,2%	Militarization of power	30,4%
	Third variable							
	Democratic accountability	9,60%	Socio-economic conditions	7,1%	rule of law	6,8%	Citizen participation	19,3%
	<b>Total</b>	<b>29,8%</b>	<b>Total</b>	<b>21,4%</b>	<b>Total</b>	<b>21,6%</b>	<b>Total</b>	<b>87,1%</b>
Countries by Type	Angola, Congo, Ethiopia, Guinea, Guinea Bissau, Togo, Uganda and Zimbabwe		DR Congo, Liberia and Sudan		Burkina Faso, Gabon, Ghana, Gambia, Madagascar, Mozambique, Namibia, Tanzania, South Africa and Zambia		Côte d'Ivoire, Cameroon, Kenya, Mali, Malawi, Niger, Nigeria and Senegal	

Reading the table, we can see that if only one variable is used to highlight the governance typology applied by country group, the weights of these variables alone cannot be significant and therefore we have opted to highlight the governance typologies by using three characteristic variables. Based on three variables, we can highlight the following governance typologies for SSA countries:

- Countries in the first group or typology are characterized by the governance variables: citizen participation, militarization of power and democratic accountability. These three variables have a weight of 29.8% which is well above the expected average of 16.67%. This

significant weight allows us to propose a typological nomenclature that characterizes a good common denominator of the three variables. Citizen participation emphasizes the will of the people to decide on the nation's major decisions. So this variable has much more of a political connotation. Similarly, the second variable Militarization is considered to have a political connotation, as it indicates the level of involvement of the army in political decisions. The third variable which is democratic accountability is by its definition with a political connotation indicates how receptive the government is to its people, because the less receptive it

is, the more likely it is that the government will fall into a democratic society, but in an undemocratic way. So we can, if all other things remain equal, characterize our first typology of governance as **political governance**.

- Countries in the second group or typology are characterized by the governance variables of ethnic tensions, internal conflicts and socio-economic status. These three variables have a weight of 21.3% which is well above the expected average of these variables which, as mentioned above, is 16.67%. This relatively low, but not negligible weight reinforces our idea of proposing a typological nomenclature that brings together the three characteristic variables of the group. Ethnic tensions assess the level of tension in a country attributable to racial, national and linguistic tensions. Internal conflicts assess the level of political violence and its influence on the evolution of the country. These first two variables can have their origins internally in the way wealth is produced and distributed. For if there are proven inequalities in this production and distribution, this can lead to internal tensions and conflicts. The socioeconomic conditions which here assess for a country the socio-economic pressures related to the lack of jobs and insufficient infrastructure. At the origin of all three variables we find the malaise linked to unequal management of the production and distribution of wealth. In the light of the above, all else being equal, we can say that the second typology of governance applied in SSA is characterized by **economic governance**.
- Countries in the third group or typology are characterized by the following governance variables: political stability, control of corruption and the rule of law. These three variables have a weight of 21.5%, which is also relatively low, but above the expected average of 16.67%. This not negligible weight reinforces us in the effort to propose a typological nomenclature that combines these three determining variables around a common denominator. Political stability highlights the process by which governments are selected, evaluated and replaced. Corruption highlights the reduction of government and business efficiency by allowing people to assume positions of power through patronage rather than capacity. This accentuates the social inequalities inherent in the process of governance. The rule of law emphasizes the social impartiality of the legal system and the assessment of popular respect for the law. Corruption control and the rule of law both therefore promote respect by citizens and the state for the institutions that govern economic and social interactions. For our third typology of governance, it will therefore be much more a question of a typology of governance characterized by **social governance**.
- Countries in the fourth group or typology are characterized by the governance variables that are: External conflicts, militarization of power and citizen participation. These three variables have a weight of 87.1%, which is far above the expected average of 16.67%. This very high weight is carried by three variables that are equally diversified, with individual contributions of 37.4%, 30.4% and 19.3% respectively. This diversification makes us perplexed at the idea of proposing a typological nomenclature that brings together the three determining variables of this group.

External conflicts measuring the risk for the outgoing government to be subjected to foreign action, ranging from non-violent external pressures to violent external pressures. This foreign pressure is in more than 90% of the cases due to the positioning of the economic interests of foreign countries. Therefore, if we stick to this variable, we will advocate a typology of economic governance. The militarization of power and citizen participation, as mentioned above, characterizes a typology of political governance. This ability of the group to consider several typologies leads us not to look for another nomenclature to federate the two observed typologies. Hence, if all other things remain equal, we advocate that this fourth group of countries is a **mixed governance** typology.

## 5. Conclusion

This paper aimed at highlighting the types of governance practiced over our study period and necessary to improve economic growth in sub-Saharan Africa. To do so, we first of all established a conceptual framework to highlight the foundations of a typological analysis of governance. Subsequently, we conducted a typological analysis using the AHC methods of governance in SSA using the WGI (2017) and ICRG (2014) databases as a starting point. From this typological analysis, it emerges that good governance in SSA calls for the following four typologies of governance:

- Political governance** driven by citizen participation, militarization of power and democratic accountability.
- Economic governance** driven by ethnic tensions, internal conflicts and socio-economic conditions.
- Social governance** driven by political stability, control of corruption and the rule of law.
- Mixed governance** driven by external conflicts, militarization of power and citizen participation.

In view of these results, we recommend that the different states of the SSA countries concentrate their energies on the proper implementation of the typology of governance selected by our study for their countries and the success of this typology will have repercussions on the other types making their different countries well-governed states.

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