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## **The White Man's Burden: On the Effect of African Resistance to European Domination**

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**AGDI Working Paper**

Research Department

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March 2016

**Oasis Kodila-Tedika, Simplicé A. Asongu & Matthias Cinyabuguma**

**Abstract**

Are there contemporary development effects of African resistance to European domination? This question is the primary issue addressed by this inquiry. We establish that African resistance has had adverse effects on post-colonial African development and discuss possible channels of such causality. This relationship is robust to alternative model and to controlling for the outliers.

*Keywords:* Africa; Colonization; Slavery; Development

*JEL Classification:* N17; P48; O11; O43; O55; P14; P17; P51

*“I do not have any intention to remain an indifferent spectator, in case distant powers would dream of dividing Africa, as Ethiopia has been for fourteen centuries a Christian island in a pagan sea ...”*

Menelik, Emperor of Ethiopia in Victoria of Great Britain, 1891. Asmai (Archives del Ministerodegli Affari Esteri, Rome), Ethiopia Pos . 36/13 -109 Menelik to Queen Victoria, Addis Ababa, 14 Miazia 1883, “added piece Tarnielli to MAE, London.

## 1. Introduction

The low growth experienced by African countries in the post-independence era up to the recent period of growth resurgence that began in the mid-1990s has motivated a substantial body of literature (see Englebert, 2000a, Jerven, 2011; Kodila-Tedika & Agbor, 2014). There is also an interesting stream of literature on the consequences of slavery and colonization on institutional and economic developments in Africa (see Englebert, 2000b; Bertocchi & Canova, 2002; Nunn, 2008; Richens, 2009; Nunn, 2010; Whatley & Gillezeau, 2011; Nunn & Wantchekon, 2011; Bezemer et al., 2014).

The present inquiry contributes to the literature by addressing the following question? Are there contemporary development effects of African resistance to European domination? To the best of our knowledge, this question has not been addressed in the literature. This is essentially because the available literature devoted to eliciting Africa's underdevelopment has for the most part been focused on the hypothesis of an African dummy of development on the one hand and on the other hand, technological change and social obstacles as causes of the continent's backwardness (Amavilah, 2015).

Adu Boahen (1987, 23) wrote “What is the attitude of Africans to the emergence of colonialism, resulting in a fundamental change in the nature of relations that had ceased to exist between them and the Europeans for three centuries? This is a question that historians, both Africans and Europeans, have not yet studied in depth, but yet it requires an answer which is unequivocal: an overwhelming majority, African governments and authorities are violently opposed to this change, express their determination to maintain the status quo, and above all to maintain their sovereignty and independence – for which practically none was willing to compromise anything”<sup>2</sup>.

As indicated by this historian, while understanding African development remains fundamental, the issue has generated little interest and research. Some qualitative attempts of the impact of African resistance on contemporary development have been noted (Huillery, 2009; Frankema, 2011, 2012) but not much empirical investigation has been conducted.

Using a cross-sectional sample of countries in sub-Saharan Africa, this study assesses the consequences of African resistance to European domination on contemporary development. We take advantage of an existing series of original data on

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<sup>2</sup> Translated; emphasis in original.

African resistance by Frankema (2011, 2012). We employ an Ordinary Least Squares (OLS) regression that enables us to establish a negative relationship between contemporary African development and the level of resistance in the past. Our investigation also extends to verifying that the established linkage withstands further empirical scrutiny from the perspective of causality. This empirical evidence has also been documented theoretically, as apparent from the historical background we relate below.

The remainder of the paper is structured as follows. Section 2 presents a historical perspective of African resistance. In Section 3, we discuss the construction of data on native resistance. Findings on correlations and causality are reported in Section 4 and Section 5 respectively, while we lay out our conclusion in Section 6.

## **2. Historical Background**

Between 1880 and 1935, the African continent experienced the onset of European colonialism resulting in the almost complete partition of the continent. According to Adu (1987ab), in 1880 only about 20% of Africa was occupied or controlled by the colonial powers or colonists. A glance at the map confirms this fact (Figure 1). However by 1914, with the exceptions of Liberia and Ethiopia, the entire African continent was under colonial influence as colonial powers had artificially divided the continent without recourse to cultural considerations. This division led to cultural damage of immense proportions. However, the conquest of Africa was not without resistance.

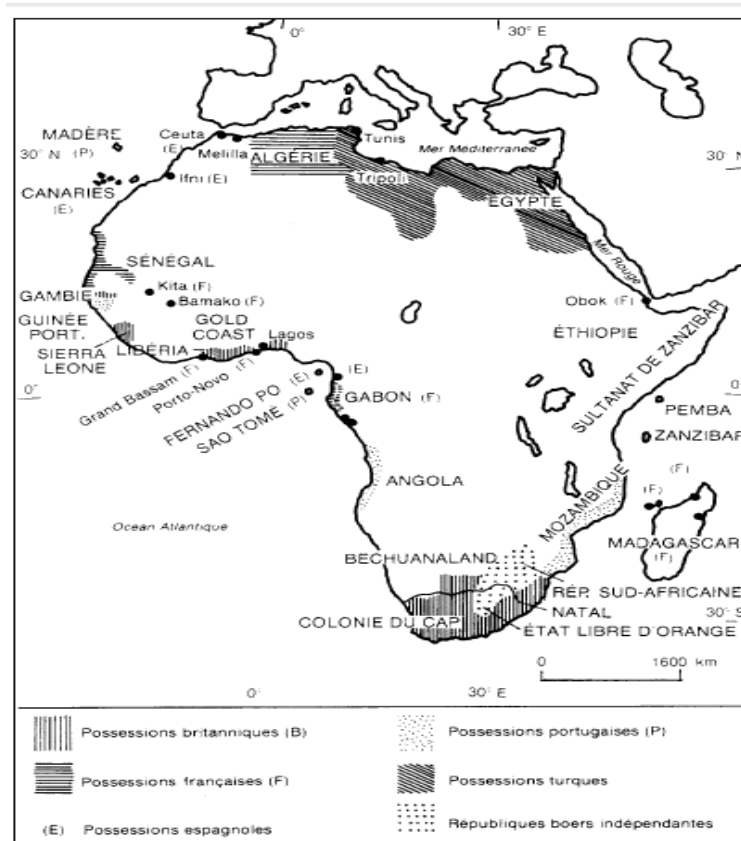
Adu (1987ab) decomposes colonial domination and reactions (resistant initiatives) from Africans into several phases. The first phase between 1880 and 1919 is characterised by confrontation in the light of defending sovereignty and independence. That phase in turn is divided into two sub-periods, namely: 1880-1890 and 1890-1919 corresponding respectively to conquest and occupation. The second phase for the period 1919-1935 is characterised by seeming adaptations by Africans which often disguised resistance and protesting strategies. The third phase starting roughly in 1935 is the period of colonial independence movements characterised by concrete strategies and increasingly active resistance.

In spite of the different phases outlined above, it is important to note that even before the first phase (Crowder, 1968, p. 17 -19), contact between Africa and the

external world had already been established. In essence, slave trade was already present and the commercialisation of human beings was already creating substantial problems within Africa on the one hand and between Africans and Europeans on the other hand. Nonetheless, from the time of the first contacts in the mid-15<sup>th</sup> century through 1880 the interactions may have been characterised as mainly commercial, as opposed to political, in nature with Africans retaining at least a modicum of political input even in those areas most directly impacted by European contact.

All of this changed dramatically; however, at the beginning of the first phase, when as an outgrowth of the continuing struggle for dominance among the European powers, Africa was distributed among those same powers during the Berlin Conference, between November 15<sup>th</sup> 1884 and November 26<sup>th</sup> 1885. The Berlin Conference recognized and led to various types of arrangements for effectuating the partition; in some cases treaties concluded between Africans and Europeans (e.g. treaties signed between Imperial British East Africa Company and the Buganda) and in others, bilateral treaties concluded between Europeans (the Anglo-German treaty on the delimitation in 1886). According to the narrative at the time, the partition of Africa was an eloquent testimony of capitalism and a display of the superiority of the 'white race' with overtones drawn from then popular theories such as social Darwinism and social Atavism.

**Figure 1. Africa in 1880 on the eve of the partition**



Source: Adu Boahen (1987ab)

In the field, the conquest was bloody and spectacular<sup>3</sup>. In 1902, the conquest of Africa was almost complete. It was a very bloody historical experience. The devastating firepower of the Maxim machine gun and the relative sophistication of European technology must have been a bitter experience for Africans. But though the conquest of Africa by Europe was relatively easy, occupation and the establishment of European administrations proved more delicate (Uzoigwe 1987, 65). The reason is simple:

<sup>3</sup> For example, France is the country that was most apparent in this military occupation policy. The French defeated the damel Kajoor, Latjor, quilutta until his death in 1886. They overcame Mamadou Lamine at the Touba – Kouta battle, in 1887, thus ending the Soninke Empire that was founded in Senegambia. They also managed to break the stubborn resistance of the great and famous Samori Toure, captured in 1898 and exiled to Gabon in 1900. A series of victories by the French characterised this époque: Koudian in 1889, Segou in 1890 and Yuri in 1891 in which Commander Louis Archinard destroyed the Tukuloor Empire of Segou, although its leader Ahmadu continued with fierce resistance until his death in Sokoto in 1898. Elsewhere in West Africa, the French conquered Côte d'Ivoire and the future French Guinea, where they established colonies in 1893. The conquest of the Kingdom of Dahomey began in 1890 and ended in 1894. By the late 1890s, the French had conquered the whole of Gabon, consolidated their positions in North Africa, completed the conquest of Madagascar (they exiled Queen Ranavalona III in 1897 to Algiers) and on the eastern border between the Sahara and the Sahel, ended the stubborn resistance of Rabah at Sennar, killed in action in 1900 (Uzoigwe, 1987, 56). England also followed the same route as the French. Other powers experienced a difficult occupation, particularly Italy. Her defeat in Adowa in 1896 substantiates this position.

Africans did not easily accept this domination. There has never really been a *pax colonica* (Ranger, 1987; Davidson, 1968, p 181 -183).

Resistance was manifested practically in all regions of European penetration. But it had striking differences in intensity from one region to another. In Northern Rhodesia (now Zambia), there were armed resistance movements, but they did not offer anything comparable in magnitude to those that were held in Southern Rhodesia (now Zimbabwe), which furthermore from an organisational viewpoint cannot be compared to resistance movements against the Portuguese in the Zambezi valley (Ranger, 1987).

In the same vein, Isaacman (1976, p. 343, 345, 370) argues that the revolt that was triggered in 1917 in the Zambezi valley was different from previous resistance movements, as it aimed at regaining independence of an important political system or a group of related people. The 1917 revolt was intended to release all Zambezi people under colonial oppression, particularly, oppressed peasants, whatever their ethnicity. *“The evolution of primitive loyalty represented a new level of political consciousness, in which the Portuguese was seen for the first time as a common oppressor”*. Beyond the content of these resistances, Ranger (1987) noted that the underlying resistance which was often driven by rational and innovative ideologies, with important consequences in their time still has significant contemporary resonance<sup>4</sup>. Authors sympathetic to the economic perspective allege that it is from the twentieth century that the real important movements of resistance to colonial rule were apparent (Ranger, 1987). As we have earlier emphasised, all African regions were affected. In North-East Africa, a major rebellion for instance was the Mahdist revolution of Sudan. In French West Africa European conquest and occupation reached their peak during the period 1880-1900 (Gueye & Boahen, 1987, 137), strongly supported by military strategy. Resistance was also active. Samori Toure, Chief of Mandenopta Empire openly opted for confrontation rather than an alliance strategy. Although he also used diplomacy, much emphasises was placed on armed resistance. In British West Africa, whereas the British occasionally favoured peaceful negotiations, some violent incidences were also apparent.<sup>5</sup>

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<sup>4</sup>Authors such as Samir Amin see things from an economic perspective. Here he describes the resistance movements which, while being directed against African aristocracy, were also a defence against French economic aggression.

<sup>5</sup>In short, in this part of Africa, there were several uprisings or rebellions, inter alia: that of Mamadou Lamine in Senegal between 1885 and 1887 and those of Fode Kabba the wizard King of Kombo and Fode Kabba, the Muslim head of Niamina and district of Casamance in Gambia between 1898 and 1901; the rebellion caused in 1898 by taxes in Sierra Leone, led by Bai Bureh; that of Ashanti Gold Coast in 1900, under the direction of the Queen of Edweso



In East Africa (Mwanzi, 1987) and Central Africa (Isaacman & Vansina, 1987), problems of this nature were also apparent. Rodney (1987) admits that for at least three decades between 1880 and 1910, African resistance substantially helped to slow-down the progress of economic colonization. But European dominance continued in the second phase (Adu Boahen, 1987).<sup>6</sup>

Between 1919 and 1935, the nationalist sentiment grew. The colonial configuration could only accelerate this process. Thus the inequalities faced by educated Africans relative to their European peers of comparable education contributed to increasing the need for African emancipation. African elites were no longer satisfied with intermediary structures, especially for economic and efficiency reasons (Olatunji Oloruntimehin, 1987). In West Africa, this period of African resistance to colonialism was characterized with the 1919 riots in Sierra Leone due to *inter alia*: frustration of the educated classes and African traders and unemployment in major cities. These riots were in fact violent and spontaneous protests against what they saw as injustices arising from the management of the colonial economy. Looting and disorder spread to Freetown in Moyamba, Kangahun (25-26 July 1919), Mano, Boia, Makump, Bo, Bonthe, Eat and Port Lokko. The situation was so serious that some troops were called-in from the Gold Coast. The situation in Central Africa is aptly documented by Davidson, Isaacman and Pelissier, (1987, 739).

### **3. Native resistance data**

The data on African resistance to colonial domination is from Frankema (2011, 2012). Consistent with the author, the index is computed on a scale of 1 to 5 with high values representing a higher level of insecurity or resistance. Seen another way, insecurity is the result of the failure of the colonial powers to invest in suppressing

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Nana YaaAsantewaa; that of Ekumeku from 1898 to 1900 and the uprising of the Aro of 1898-1902 in Eastern Nigeria; the rebellion of Bariba Borgou and Atakora Somba of Dahomey between 1913 and 1914; those of Mosi in Koudougou and Fada N'Gourma Upper Volta from 1908 to 1909; the uprising in Porto Novo in Dahomey and the revolts of Baulé of Akoussé, Sassandra and Guro in Ivory Coast between 1900 and 1914, and the plethora of uprisings that took place in several places of Guinea between 1908 and 1914. It is interesting to note that these rebellions redoubled intensity during the First World War (Ikime 1973; Afigbo 1973).

<sup>6</sup> Crowder (1987) pointed out that even during World War I, resistance was still apparent, especially in regions such as Southern French West Africa, Côte d'Ivoire, and much of Libya or Karamoja Uganda were characterised with many armed uprisings and other forms of protests. Reasons for these uprisings are documented in Crowder (1987, 322-323).

resistance movements. The interval between the Berlin conferences (of 1884-1885) and the beginning of World War I is most important in determining this index.<sup>7</sup>

Accordingly, the index is constructed based on the following criteria for colonies: (i) under full European control before 1885; (ii) brought under control during the period 1885-1914 by treaties in the absence of notable armed struggles with the European colonial power(s); (iii) pacified between 1885 and 1914 by employment of force with consequences of demographic nature; (iv) pacified between 1885 and 1914 with the employment of armed forces against resistant movements to European rule; and (v) not entirely controlled prior to 1914 because of recurrent revolts and/or ongoing guerrilla warfare. Frankema's resulting data corresponding to these categories is represented in Table 1.

Table 1. Resistance index

Countries	Native resistance	Countries	Native resistance
Angola	5	Mali	3
Burundi	5	Mozambique	5
Benin	3	Mauritania	3
Burkina Faso	4	Mauritius	1
Botswana	2	Malawi	3
Central African Republic	5	Namibia	4
Côte d'Ivoire	3	Niger	5
Cameroon	3	Nigeria	3
Congo	3	Rwanda	5
Djibouti	2	Sudan	5
Ethiopia	5	Senegal	3
Gabon	3	Sierra Leone	3
Ghana	3	Somalia	5
Guinea	3	Sao Tome & Principe	1
Gambia	3	Swaziland	1
Guinea-Bissau	5	Chad	5
Equatorial Guinea	2	Togo	2

<sup>7</sup> As previously noted, the conference of Berlin marks the beginning of the conquest of the African continent on a massive scale.



$\ln(\text{exports}_i/\text{area}_i)$  as an additional control to account for the total number of slaves exported during the period 1400-1900, after normalization with land area. Other control variables to capture the potential relevance of geography for economic development in the long-run are included, namely: (i) minimum monthly rainfall; (ii) average minimum temperature; distance from the equator; (iii) proximity to the ocean measured by the natural log of coastline divided by land area; (iv) longitude; and, (v) average maximum humidity. With the exception of longitude, all these factors do influence our results for a nation endowed with a tropical climate that affects agricultural productivity and subject to the prevalence of infectious diseases (Sachs et al., 2001). We also include longitude to account for variations between the western and eastern parts of Africa. The sources of the variables are provided in the Appendices.

Table 2 contains results of estimations that are consistent with Nunn (2008). In the first column, only variables based on colonial observations are reported. We consider the variable that captures resistance to colonialism and dummies of colonial identities. The variable of interest is negatively significant even after controlling for other indicators in the conditioning information set. The relationship is consistently negatively significant, though with decreased degrees of significance and magnitude. For example, an increase by one standard deviation in the level of resistance in the baseline regression is associated with about 1.9 percent decrease in GDP per capita.

**Table 2. Main results**

	I	II	III	IV
Native resistance	-0.320*** (0.095)	-0.301** (0.119)	-0.192* (0.110)	-0.194* (0.098)
Distance from equator		-0.480 (0.599)	-0.851 (0.622)	-0.990* (0.539)
Longitude		0.010 (0.007)	0.003 (0.005)	0.005 (0.005)
Lowest monthly rainfall		0.019 (0.031)	0.017 (0.034)	-0.004 (0.035)
Avg max humidity		-0.005 (0.014)	-0.011 (0.017)	-0.007 (0.017)
Avg min temperature		-0.003 (0.009)	-0.001 (0.013)	-0.002 (0.009)
ln(coastline/area)		-0.052 (0.078)	-0.089 (0.082)	-0.095 (0.076)
Percent islam			-0.003 (0.004)	0.001 (0.001)
UK legal origin			-1.146	-1.196 (0.830)
ln(gold prod/pop)				0.008 (0.018)
ln(oil prod/pop)				0.064* (0.032)
ln(diamond prod/pop)				0.035 (0.075)
Colonizer fixed effects	Yes	Yes	Yes	Yes
Number of observations	42	42	42	42
R <sup>2</sup>	0.248	0.339	0.369	0.5794
Joint signific. of resistance(p)	0.002	0.017	0.093	0.058
Sqr. Partial Correlation	0.2238	0.1306	0.0385	0.0376
Sum of Sqr. Partial Correlations (colonized fixed effect)	0.3411	0.2930	0.3078	0.2443

**Notes.** OLS estimates of (1) are reported. The colonizer fixed effects are indicator variables for the identity of the colonizer at the time of independence. Coefficients are reported with standard errors in brackets. All regions contain a constant term. 0.01 - \*\*\*; 0.05 - \*\*; 0.1 - \*.

In Table 3, we replicate the estimations of the last column of Table 2 with emphasis on extreme observations. The two estimation techniques employed are Least Trimmed Squares and the S-Estimator. Box-transformation, or transformation of the resistance variable, is also employed. We notice that the variable of interest remains consistently significant with the same negative sign, but with an improved coefficient. Hence, we conclude that native resistance is negatively linked to contemporary African economic development.

**Table 3.—Robustness with Respect to Influential Observations**

	Least trimmed squares	Box-Cox Transformation of Native resistance	S- Estimator
Native resistance	-0.420*** (0.033)	-0.152*** (0.080)	-0.126*** (0.034)
Constant	13.311*** (0.239)	10.291*** (1.0464)	10.794*** (0.239)
Number of observations	42	42	42

**Notes.** OLS estimates of (1) are reported. The colonizer fixed effects are indicator variables for the identity of the colonizer at the time of independence. Coefficients are reported with standard errors in brackets. All regions contain constant and reproduce control variables in the last column of Table 2. 0.01 - \*\*\*; 0.05 - \*\*; 0.1 - \*.

## 5. Possible channels of causality

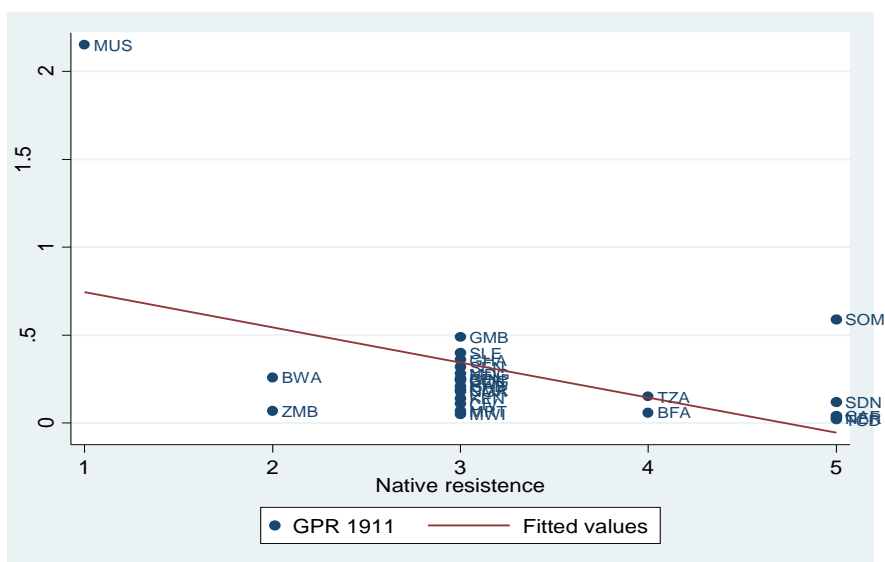
How is the relationship established by the correlations in the preceding section reflected in contemporary economic development in Africa? Following Nunn (2008), and without pretending to be exhaustive, we present a preliminary and exploratory analysis of possible mechanisms.

The first channel via which ‘native resistance’ affects contemporary development is Gross Public Revenue per capita. For example, in 1898, chiefs associated with Mende in Sierra Leone, revolted under the leadership of one and unanimously decided not to pay the tax, Bai Bureh. The rebellion resulted from the promulgation by the British government of the 1896 Protectorate Ordinance which established direct British governance and imposed a taxation regime of 5 shillings for two-room houses and 10 shillings for larger houses annually.

Besley and Persson (2013) have established the link between taxation (or public source of income) and development. Figure 2 shows a negative relationship between the degree of resistance and public income<sup>8</sup>. This implies that the state apparatus did not mobilise sufficient financial resources to offset the costs of administering the various colonies, seemingly because native resistance increased with the growth of colonial administrators and implicitly taxation (see Figure 3).

According to Huillery (2014), the colonisation of Western Africa by France was not costly to the French tax payer. This elucidates why there was little public investment by France in the sub-region during the colonial era. In essence, public finance to run the French colonies came from taxation of the African inhabitants. In other words, it is reasonable to infer that greater mobilisation of financial resources would have led to more public investments, but active or passive resistance by African populations sapped the resources of colonial governments delaying or preventing increased investment in public infrastructure or services (Figure 2).<sup>9</sup> Conversely, regions where there was less resistance to colonial rule benefited from more colonial public investment and enjoy high schooling rates, more household goods and better public services such as health care

**Figure 2: Fiscal income per capita vs Native resistance**



<sup>8</sup>The data is obtained from Frankema and van Waijenburg (2013).

<sup>9</sup>This conclusion elicits another link between native resistance and development. In essence, the provision of public services is a function of mobilised resources and when the allocation of resources is inefficient, inequality naturally results. At least one contemporary study has found that in turn inequality negatively affects development (Asongu & Nwachukwu, 2016ab).

Another mechanism through which African resistance could impact contemporary development is in terms of human capital. Bolt and Bezemer (2009) have established that accumulated human capital during the colonial era is a robust predictor of contemporary African development. Meanwhile, Frankema (2011, 2012) find a highly negative nexus between the levels native resistance and human capital accumulation. By this mechanism, it can be reasonably inferred that there is a relationship between contemporary development and the degree of colonial resistance in the past.

## **6. Conclusion**

Nunn (2009) posited history is important for development and/or influences the development of nations. This study has arrived at a similar conclusion by focusing on the relationship between African native resistance and European colonial domination. We have established that African resistance to colonial domination has had an impact on the continent's contemporary development. Generally speaking resistance has had negative repercussions in terms of contemporary economic development. This relationship is robust to the control of outliers and extreme values. We have also discussed possible channels of causality between native resistance and contemporary African economic development.



## References

- Adewole, M. A., and Osabuohien, E. S., 2007. Analysis of Cost of Governance and Its Reduction Options in Nigeria, *Nigerian, Journal of Economic and Social Studies*, 49(1), 137-159.
- AduBoahen, A., 1987a. L'Afrique face au défi colonial, In AduBoahen, A., *Histoire générale de l'Afrique : VII L'Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO, 21-38.
- AduBoahen, A. 1987b. La politique et le nationalisme en Afrique occidentale, 1919 - 1935, *Histoire générale de l'Afrique : VII L'Afrique sous domination coloniale, 1880-1935*, 669-694
- Afigbo, A. E. 1973. Patterns of Igbo resistance to British conquest. *Tarikh*, 4(3), p. 14 - 23.
- Ahmed Ibrahim, H. 1987. La politique et le nationalisme en Afrique du Nord-Est, 1919 -1935, *Histoire générale de l'Afrique : VII L'Afrique sous domination coloniale, 1880-1935*, 625-648.
- Amavilah, V. H., 2006. Institutional change and economic performance: An off-the-cuff comment on Professors Daron Acemoglu, Simon Johnson, and James Robinson's three papers, Glendale College, United States.
- Amavilah, V. H. 2014. Sir W. Arthur Lewis and the Africans: Overlooked economic growth lessons, MPRA Paper No. 57126, Munich.
- Amavilah, V. H., 2015. Social Obstacles to Technology, Technological Change, and the Economic Growth of African Countries: Some Anecdotal Evidence from Economic History, MPRA Paper No. 63273, Munich.
- Amavilah, V. H., Asongu, S. A., and Andrés, A. R., 2014. Globalization, Peace & Stability, Governance, and Knowledge Economy, *African Governance and Development Institute Working Paper No. 14/012*, Yaoundé.
- America, R., 2013. Economic Development with Limited Supplies of Management. What to do about it – the case of Africa, *Challenge*, 56(1), 61-71.
- Amin, S. 1972. Underdevelopment and dependance in Black Africa: origins and contemporary forms. *Journal of African studies*, 10(4), p. 503 -524.
- Amin, S.1974. *Accumulation on a world scale: a critique of the theory of underdevelopment*, New York, Monthly Review Press.
- Asongu, S. A., 2014a. Knowledge Economy Gaps, Policy Syndromes and Catch-up Strategies: Fresh South Korean Lessons to Africa, *African Governance and Development Institute Working Paper No. 14/014*, Yaoundé.

- Asongu, S. A., 2014b. Knowledge Economy and Financial Sector Competition in African Countries, *African Development Review*, 26(2), 333-346.
- Asongu, S. A., 2014c. The Questionable Economics of Development Assistance in Africa: Hot-Fresh Evidence, 1996-2010, *The Review of Black Political Economy*, 41(4), 455-480.
- Asongu, S. A., 2014d. Software Piracy and Scientific Publications: Knowledge Economy Evidence from Africa, *African Development Review*, 26(4), 572-583.
- Asongu, S. A., Amavilah, V. H., and Andrés, A. R., 2014. Economic Implications of Business Dynamics for KE-Associated Economic Growth and Inclusive Development in African Countries, *African Governance and Development Institute Working Paper No. 14/023*, Yaoundé.
- Asongu, S. A., & Kodila-Tedika, O., (2015). “Is Poverty in the African DNA(Gene)?”, *African Governance and Development Institute No. 15/11*, Yaoundé.
- Asongu, S. A., and Nwachukwu, J. C., 2016a. Foreign aid and inclusive development: updated evidence from Africa, 2005-2012, *Social Science Quarterly*, DOI: 10.1111/ssqu.12275.
- Asongu, S. A., and Nwachukwu, J. C., 2016b. Finance and Inclusive Human Development: Evidence from Africa, *Brussels Economic Review: Forthcoming*.
- Austin, G. 2008. The “Reversal of fortune” thesis and the Compression of history: Perspectives from African and Comparative Economic History, *Journal of International Development*, 20, 996–1027.
- Bertocchi, G. and Canova, F. 2002. Did Colonization Matter for Growth? An Empirical Exploration into the Historical Causes of Africa’s Underdevelopment. *European Economic Review* 46, 1851-1871.
- Besley, T.J. and Persso, T. 2013. Taxation and Development, In Auerbach, A, R. Chetty, M. Feldstein, and E. Saez (eds.) *Handbook of Public Economics*, Vol.5, 51-110.
- Bezemer, D., Bolt, J. and Lensink, R. 2014. Slavery, Statehood and Economic Development in Sub-Saharan Africa, *World Development* 57, 148–163.
- Bolt, J. and Bezemer, D. 2009. Understanding Long-Run African Growth: Colonial Institutions or Colonial Education?, *Journal of Development Studies*, 45(1), 24-54.
- Boahen, A. A., and M'Baye Gueye, 1985. African initiatives and resistance in West Africa, 1880-1914. in: Boahen, A. A. (Eds.), *General History of Africa VII. Africa under Colonial Domination 1880-1935* University of California Press, Berkeley, pp: 114-148.

- Brush, S. B., and Stabinsky, D., 1996. *Valuing Local Knowledge: Indigenous people and intellectual property rights*. Washington, DC: Island Press.
- Chanaiwa, D., 1985. African initiatives and resistance in Southern Africa, 1880-1914. in: Boahen, A. A. (Eds.), *General History of Africa VII. Africa under Colonial Domination 1880-1935*, University of California Press, Berkeley, pp: 194-220.
- Coquery-Vidrovitch, C., 1992. *L'Afrique occidentale au temps des français: colonisateurs et colonisés (c. 1890- 1960)* La Découverte, Paris.
- Crowder, M. 1968. *West Africa under colonial rule*, Londres, Hutchinson.
- Crowder, M., 1978. *Colonial West Africa: collected essays*. Frank Cass and Company Ltd., Totowa, NJ.
- Crowder, M. 1987. La première guerre mondiale et ses conséquences, In AduBoahen, A., *Histoire générale de l'Afrique : VII L'Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO,307-338.
- Davidson, A. B. Isaacman, A.F. andPélissier, R.1987. La politique et le nationalisme en Afrique centrale et méridionale, 1919 -1935, In AduBoahen, A., *Histoire générale de l'Afrique : VII L'Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO,721-760.
- Dorfman J., 1939. Predecessors of Adam Smith: The Growth of British Economic Thought. by E. A. J. Johnson, *Political Science Quarterly*, 54(1), 103-105.
- Drine, I., 2013. 'Successful' Development Models: Lessons from the MENA Region, In *Achieving Development Success: Strategies and Lessons from the Developing World*, ed. Fosu, A., Oxford University Press.
- Duffy, J., 1959. *Portuguese Africa*. Harvard University Press, Cambridge, MA.
- Efobi, U., Osabuohien, E., and Beecroft, I., 2013. The Macroeconomic Consequences of the Black Sunday in Nigeria”, in Adibe, J. (Ed.), *The Politics and Economics of Removing Subsidies on Petroleum Products in Nigeria*, Adonis & Abbey Publishers, London & Abuja.
- Emmanuel, A. 1972. *Unequal exchange: a study of the imperialism of trade*, New York. Monthly Review Press.
- Englebert, P. 2000a. Solving the Mystery of the Africa Dummy, *World Development*, 28, 1821–1835.
- Englebert, P. 2000b. Pre-Colonial Institutions, Post-Colonial States, and Economic Development in Tropical Africa, *Political Research Quarterly*, 53, 7–36.
- Esoavelomandroso, M., 1985. Madagascar, 1880s-1930s: African initiatives and reaction to colonial conquest and domination. in: Boahen, A. A. (Eds.), *General*

History of Africa VII. Africa under Colonial Domination 1880-1935, University of California Press, Berkeley, pp: 221-248.

- Fofack, H., 2014. The Idea of Economic Development: Views from Africa, WIDER Working Paper No. 2014/093, Helsinki.
- Fosu, A., 2013. Achieving development success: Strategies and lessons from the developing world, UNU-WIDER Policy Brief (November).
- Frankema, E. 2011. The Origins of Formal Education in sub-Saharan Africa Was British Rule More Benign?, CGEH Working Paper Series Working Paper No. 5.
- Frankema, E. 2012. The Origins of Formal Education in sub-Saharan Africa Was British Rule More Benign?, *European Review of Economic History* 16(4): 335-355.
- Frankema, E. and van Waijenburg, M 2013. Endogenous Colonial Institutions. Lessons from Fiscal Capacity Building in British and French Africa, 1880-1940, *African Economic History Working Paper Series* No. 11/2013.
- Gann, L. H., Duignan, P., 1977. The rulers of German Africa, 1884-1914. Stanford University Press, Stanford, CA.
- Grier, R. M. 1999. Colonial Legacies and Economic Growth, *Public Choice*, 98, 317–335.
- Hanna, A. J., 1960. The Story of the Rhodesias and Nyasaland. Faber and Faber Ltd, London.
- Huillery, E. 2009. History Matters: The Long Term Impact of Colonial Public Investments in French West Africa, *American Economic Journal - Applied Economics*, 1(2): 176-215.
- Huillery, E. 2011. The Impact of European Settlement within French West Africa. Did pre-colonial prosperous areas fall behind? *Journal of African Economies* 20 (2): 263-311.
- Huillery, E. 2014. The Black Man's Burden - The Cost of Colonization of French West Africa, *Journal of Economic History*, 74(1): 1-38.
- Ibrahim, H. A., 1985. African initiatives and resistance in North-East Africa. in: Boahen, A. A. (Eds.), *General History of Africa VII. Africa under Colonial Domination 1880-1935*, University of California Press, Berkeley, pp: 63-86.
- Ikime, O. 1973. Colonial conquest and African resistance in the Niger delta states. *Tarikh*, IV(3), p. 1 -13.

- Isaacman, A. 1972. Mozambique: the africanization of a European institution; the Zambesi Praios, 1750 1976. Anti-colonial activity in the Zambesi Valley, 1850 - 1921, Berkeley, University of California Press.
- Isaacman, A., Vansina, J., 1985. African initiatives and resistance in Central Africa, 1880-1914 in: Boahen, A. A. (Eds.), General History of Africa VII. Africa under Colonial Domination 1880-1935, University of California Press, Berkeley, pp: 169-193.
- Isaacman, A. and Vansina, J. 1987. Initiatives et résistances africaines en Afrique centrale de 1880 à 1914, In AduBoahen, A., Histoire générale de l'Afrique: VII L'Afrique sous domination coloniale, 1880-1935, Éditions UNESCO, 191-216.
- Jerven, M. 2011. The quest for the African dummy: Explaining African post-colonial economic performance revisited. *Journal of International Development*, 23(2), 288–307.
- Kayizzi-Mugerwa, S., 2001. Globalisation, Growth and Income Inequality: The African Experience, Working Paper No. 186, OECD Development Centre, Paris.
- Kayizzi-Mugerwa, S., Anyanwu, J. C., and Conceição, P., 2014. Regional Integration in Africa: An Introduction, *African Development Review*, 26(S1), 1-6.
- Kodila-Tedika, O. 2011. Esclavagisme et colonisation: quelles conséquences en Afrique ? Résumé critique des travaux de l'économiste Nathan Nunn. *Revue Congolaise d'Economie*, 6(1), 41-61.
- Kodila-Tedika, O. and Agbor A., J., 2014. Religious Diversity and Economic Development in Sub-Saharan Africa: So Far So Good, *Journal of African Development* 16(1), 99-117.
- Kodila-Tedika, O. and Tcheta-Bampa, A. 2015. Conséquences institutionnelles des types de transition à l'indépendance pour les pays africains, mimeo.
- Koffi, S. 1976. Les Agni-Diabé, histoire et société, thèse de doctorat de troisième cycle, Université de Paris I.
- Kuada, J., 2015. Private Enterprise-Led Economic Development in Sub-Saharan Africa The Human Side of Growth First edition by Kuada, J, Palgrave Macmillan: New York.
- Langley, J. A. \_\_\_\_\_. The last stand in West Africa : resistance to British rule in West Africa, 1879 -1939. (communication non publiée).
- Lewis, A., 1955. Theory of Economic Growth. Milton Park: Routledge.
- Looney, R. E., 2013. The Omani and the Bahraini Paths to Development: Rare and Contrasting Oil-Based Economic Success Stories, In *Achieving Development*

Success: Strategies and Lessons from the Developing World, ed. Fosu, A., Oxford University Press.

- Lwoga, E. T., Ngulube, P., and Stilwell, C., 2010. Managing indigenous knowledge for sustainable agricultural development in developing countries: Knowledge management approaches in the social context, *The International Information & Library Review*, 42(3),172-185.
- Lucas, R. E., 1993. Making a miracle, *Econometrica*, 61(2), 251-272.
- Gueye, M., andBoahen, A. 1987. Initiatives et résistances africaines en Afrique occidentale de 1880 à 1914, In AduBoahen, A., *Histoire générale de l’Afrique : VII L’Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO, 137-170.
- Maddison, A. 2003. *The World Economy: Historical Statistics*, Organisation for Economic Co-operation and Development, Paris.
- Mafeje, A. 1972. The fallacy of dual economies. *East Africa journal*, vol. IX, n° 2.
- Meillassoux, C. 1972. From reproduction to production. A marxist approach to economic anthropology. *Economy and society*, I(1), p. 93 -105.
- Monga, C., 2014. The False Economics of Pre-Conditions: Policymaking in the The African Context, *Journal of African Development*, 16(2), 121-140.
- Moyo, D. 2009. *Dead Aid: Why Aid Is Not Working and How There is Another Way for Africa*. New York: Farrar, Straus and Giroux.
- Musila, J. W., and Sigué, S. P., 2010. Corruption and International Trade: An Empirical Investigation of African Countries, *World Economy*, 33(1),129-146.
- Mwanzi, H. A. 1987. Initiatives et résistances africaines en Afrique orientale de 1880 à 1914, In AduBoahen, A., *Histoire générale de l’Afrique : VII L’Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO,361-380.
- Mwanzi, H. A., 1985. African initiatives and resistance in East Africa, 1880-1914. in: Boahen, A. A. (Eds.), *General History of Africa VII. Africa under Colonial Domination 1880-1935*, University of California Press, Berkeley, pp: 149-168.
- Ndlovu-Gatsheni, S. J. 2013. The Entrapment of African within the Global Colonial Matrices of Power: Eurocentrism, Coloniality and Deimperialieation in the Twenty-first century, *Journal of Developing Societies*, 29(4), 331-353.
- Nunn, N. 2008. The Long-Term Effects of Africa’s Slave Trades. *Quarterly Journal of Economics* 123, 139-176.
- Nunn, N. 2009. The Importance of History for Economic Development, *Annual Review of Economics*, 1(1), 65-92.

- Nunn, N. 2010. Shacked to the Past: The Causes and Consequences of Africa's Slave, In Diamond, J. and Robinson, J. A. (eds.), *Natural Experiments of History*, pp. 142-184. Harvard University Press.
- Nunn, N., and Puga, G., 2012. Ruggedness: The blessing of bad geography in Africa. *Review of Economics and Statistics*, 94(4), 20-36.
- Nunn, N. and Wantchekon, L. 2011. The Slave Trade and Origins of Mistrust in Africa, *American Economic Review*, 101(7), 3221–3252.
- Obeng-Odoom, F. 2013. Africa's Failed Economic Development Trajectory: A Critique, *African Review of Economics and Finance*, 4(2), 151-175.
- Obeng-Odoom, F. 2015. Africa: On the Rise, but to Where?, *Forum for Social Economics*, 44(3), 234-250.
- Ogot, B. A. (dir. publ.). 1974. *Zamani : a survey of East African history*, Nairobi, EAPH, 2eéd.
- OlatunjiOloruntimehin. 1987. La politique africaine et le nationalisme africain 1919 - 1935, In AduBoahen, A., *Histoire générale de l'Afrique : VII L'Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO, 609-624.
- Packenham, T., 1992. *The Scramble for Africa. The White Man's Conquest of the Dark Continent from 1876- 1912*. Avon Books, New York.
- Parker, P. M. 1997. *National Cultures of the World: A Statistical Reference*, London: Greenwood Press.
- Philippe, A. 2010. L'impact économique de l'esclavage dans les pays de l'ancienne Afrique Occidentale Française, *Mémoire de DEA*, Paris School of Economics.
- Ranger, T. O. (dir. publ.). 1968. *Emerging themes of African history*, Nairobi, EAPH.
- Ranger, T.O. 1987. Initiatives et résistances africaines face au partage et à la conquête, In AduBoahen, A., *Histoire générale de l'Afrique: VII L'Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO, 67-86.
- Raseroka, K., 2008. Information transformation Africa: Indigenous knowledge – Securing space in the knowledge society, *The International Information and Library Review*, 40, 243- 250.
- Richens, P. 2009. The economic legacies of the thin white line: indirect rule and the colonial comparative development of sub-Saharan African, *Economic History Working Paper No. 131/09*.
- Rodney, W. 1987. L'économie coloniale, In AduBoahen, A., *Histoire générale de l'Afrique: VII L'Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO, 361-380.

- Rousseeuw, P. J., and V. J. Yohai. 1984. Robust regression by means of S-estimators. In *Robust and Nonlinear Time Series Analysis*, ed. J. Franke, W. Hardle, and R. D. Martin, 256–276. New York: Springer.
- Sachs, J. D., Mellinger, A.D. and Gallup, J.L. 2001. The Geography of Poverty and Wealth, *Scientific American*, 284, 70–76.
- Salibian-Barrera, M., and V. J. Yohai (2006). A Fast Algorithm for S-Regression Estimates. *Journal of Computational and Graphical Statistics*, 15: 414-427.
- Sorrenson, M. P. K., 1968. *Origins of European settlement in Kenya*. Oxford University Press, Nairobi.
- Tchamyou, S. V., 2015. *The Role of Knowledge Economy in African Business*, African Governance and Development Institute Working Paper No. 15/049, Yaoundé.
- Thompson, V., Adloff, R., 1968. *Djibouti and the Horn of Africa*. Stanford University Press, Stanford, CA.
- Thompson, V., Adloff, R., 1960. *The Emerging States of French Equatorial Africa*. Stanford University Press, Stanford, CA.
- Uzoigwe, G.N. 1987. Partage européen et conquête de l’Afrique: aperçu général, In AduBoahen, A., *Histoire générale de l’Afrique: VII L’Afrique sous domination coloniale, 1880-1935*, Éditions UNESCO, 39-66
- Wantchékon, L. and García-Ponce, O. 2014. *Critical junctures: independence movements and democracy in Africa*, Department of Economics, University of Warwick 2013 (173)
- Weiskel, T. C. 1980. *French colonial rule and the Baule peoples, 1889 -1911*, Oxford, Clarendon Press.
- Whatley, W. and Gillezeau, R. 2011. The Impact of the Transatlantic Slave Trade on Ethnic Stratification in Africa, *American Economic Review Papers and Proceedings*, 1-9.



## Appendices

### Data

**Real GDP per capita** data is obtained from Maddison (2003).

Land area which is employed to compute  $\ln(\text{coastline}/\text{area})$ ,  $\ln(\text{export}/\text{area})$  and population density around the year 1400, is measured in millions of kilometres square (see Parker, 1997).

**Distance from the equator** is measured as the absolute value of the latitude corresponding to each country's centroid, appreciated in degrees.

**Longitude** represents the longitude of the centroid of each country which is also measured in degrees. The computation of each country's centroid is done employing the Centroid Utility in ArcGIS. In five countries where the centroid is not within national borders (Cape Verde, Gambia, Mauritius, Seychelles and Somalia), the closest to the centroid within the country is used.

**Location on the coast** is that which is nearest to centroid of each country as identified using the Proximity Utility in ArcGIS.

**Lowest rainfall** on a monthly basis represents the average rainfall which is measured in driest month of the year in terms of millimeters.

**Average maximum humidity** represents the average of the maximum afternoon humidity that is measured during the hottest month of the year in percentage terms.

**Average minimum temperature** refers to the lowest average temperature in a month, measured in terms of degrees Celsius. As reported in Parker (1997), the data are from meteorological observations that are collected over a period of 30 years.

**Total coastline** of countries is also from Parker (1997). It is used with land area to compute  $\ln(\text{coastline}/\text{area})$ , which is also measured in thousands of kilometers.

**Percent Islamic indicator** refers to the percentage of the Islamic population of a country (see Parker, 1997).

**Legal origins** is obtained from La Porta et al. (1999). All nations in the sample are coded as French civil or British common law countries.

**Production of mined gold, crude petroleum and diamonds** are from the British Geological Survey's World Mineral Statistics and World Mineral Production. All the three indicators are computed as the natural logarithm of the mean annual per capita production during the period 1970-2000. Diamonds which consist of both industrial diamonds and gemstones are measured in thousands of carats; mined gold is measured in kilograms while Crude petroleum is computed in thousands of tones.