Journal of Economics Bibliography
econsciences.com
Volume 10 September-December 2023 Issue 3-4

Intergovernmental coordination and fiscal performance

By Boris Noé MANHOULI DANMOU [a†]
Ghislain MOFFO DZOUBOSSE [b]
& William SEUGUE NIETCHO [c]

Abstract. In recent years, governance issues have been identified as critical to macroeconomic performance. This study aims to contribute to the debate on the role of governance in allocating public spending in general and specifically in education spending, focusing on a panel of the six CEMAC countries from 1997–2013. It thus examines the role of governance as measured by the level of corruption, political stability, government effectiveness, regulatory quality, and the level of voice and accountability in the allocation of public expenditure to education through a linear regression in static panel data. It emerges empirically that a low allocation of public spending on education can be largely explained by a poor quality of governance in CEMAC.
Keywords. Governance, Public spending, Education, Panel data, CEMAC.
JEL. E62; I28; H52; H11.

1. Introduction

Faced with the difficulty of explaining the economic growth of the United States in the 1960s by the traditional production factors (physical capital, land, labour and management) of the 1950s (Schultz, 1961; Denison, 1962), the literature of Schultz (1961) favoured the notion of human capital as the missing residual factor. Defined as all the productive capacities an individual acquires through the accumulation of general or specific knowledge, know-how, etc. (Becker, 1962), this form of capital was theorised as human capital. According to Lucas (1988), the main principle underpinning it is the belief that the learning capacities of individuals have a value comparable to the value of other resources needed to produce goods and services. Thus, when the human factor is used optimally, the results benefit the individual, the organisation to which he or she belongs, and society as a whole (Schultz, 1961).

Human capital theory therefore seeks to explain the gains from education and training as a form of investment in human resources (Aliaga, 2001; Kallias *et al.*, 2023). The fundamental proposition underlying it is that people are regarded as a form of capital for development (Benhabib & Spiegel, 1994; Aliaga, 2001; Engelbrecht, 2003; Fouda *et al.*, 2022). From this perspective, education and schooling are seen as deliberate investments that prepare the workforce and increase the productivity of individuals and organisations, while promoting international growth and development (Nafukho *et al*, 2004).

[a] University of Dschang Cameroon, Faculty of Economics and Management, Cameroon.
[b] University of Dschang Cameroon, Faculty of Economics and Management, Cameroon.
[c†] University of Dschang Cameroon, Faculty of Economics and Management, Cameroon.

In light of these findings, education can form part of so-called endogenous growth strategies.

In line with the axioms of endogenous growth theory, education takes a more advanced form in terms of human capital, especially the skills needed in modern society. More specifically, Barro (1991) points out that it is the skills possessed by workers that will improve productivity, and the accumulation of physical capital and therefore increase the level of wealth. In a similar vein and on a global scale, Musgrave (1959), in his book "The Theory of Public Finance", stresses that all public spending contributes to the achievement of one or more objectives, namely the regulation of economic activity, the redistribution of income or even wealth, and the allocation of resources. However, the reality may be quite different in sub-Saharan African countries.

The countries of the CEMAC zone continue to experience weak economic growth despite the entry into force of the zone's Regional Economic Programme (PER). These are developing countries that are heavily dependent on the outside world, and whose economies are not very diversified, depending on the extractive industry and the agricultural sector. While countries such as Congo, Gabon and Equatorial Guinea are predominantly oil-based, Cameroon is relatively diversified (GDP by sector varies from 24.5% as a total percentage for the primary sector in 2012 to 26.2% in 2016; from 22.1% in 2012 to 21.3% in 2016 for the secondary sector and finally from 45.5% in 2012 to 44.6% in 2016 for the tertiary sector; CAR (primary sector varies from 47.9% in 2012 to 42.6% in 2016; the secondary sector varies from 18.9% in 2012 to 16.1% in 2016 and the tertiary sector from 27.5% in 2012 to 35.8% in 2016. Chad (55.6% of GDP in 2012 compared with 40.5% in 2016) (BEAC, 2007).

However, the ability to diversify the economy, to move from a single-digit to a double-digit growth rate and to be self-sufficient requires a high level of education. Education is one of the most important tools for building human capacity and achieving the desired socio-economic development goals (Asongu *et al.,* 2020). It enables individuals to make informed choices, broaden their horizons and opportunities and have a say in public decision-making. From this point of view, these skills can help through new rules of administration under the auspices of New Public Management (NPM), which has been at the centre of developments in public administrations since the early 1980s, and the principles of good governance (Hood, 1995; Bhuiyan, 2011).

In public finance, this evolution is characterised by the rationalisation of expenditure and the search for efficiency in public action (Felts and Jos, 2000). In Central Africa, this management style was imported into developing countries at the CEMAC Council of Ministers meeting in June 2008, which adopted directives for the harmonisation and modernisation of public finance management in its member states. This reform makes it possible to meet the demands and expectations of citizens, who are also, depending on the case, users, taxpayers, beneficiaries and voters, all concerned with the principles of good governance.

Generally speaking, performance can be defined as the achievement of set objectives (Bourguignon, 1995). However, observation of the performance of public organisations shows that it is a fairly subjective notion, depending as it does on the system in which it is observed, the mechanisms, procedures and objectives (Conaty, 2012; Hyndman & McDonnell, 2009). For example, the objective indicators at the national level, refer to the growth of major national aggregates such as gross domestic product (Stiglitz *et al.,* 2009) and other

indicators such as public spending, infrastructure, the level of education (Mihaiu *et al.*, 2010), etc.

Therefore, at the macroeconomic level, education means strong and sustainable economic growth through a productive and skilled workforce. At the microeconomic level, however, education is strongly correlated with or allocated to investment and education services in public infrastructure (Agénor, 2012; Uzun & Celik-Simsek, 2018). Illiteracy rates in the CEMAC zone are low. For example, Chad had a literacy rate of 22.72% in 2015 and 30.79% in 2016, compared with Southeast Asian countries such as Thailand (98.14663% in 2016) and Malawi (72.93561%), which are relatively low. However, a few years ago these countries were similar to those in the CEMAC zone. The CEMAC countries are facing a huge education problem, even though education occupies an important place in development strategies.

Faced with financial problems, these countries are accentuating a low allocation to education spending, even though they have recently emerged from the HIPC initiative, which provided them with financial relief. As a result of this debt reduction, the budgets of these various States have increased, with a high proportion of State operating expenditure between 1997 and 2016, while investment expenditure remains relatively very low. This low level of investment spending leads to a very low allocation of spending on education, which is associated with a still low level of governance. Indeed, governance problems are recurring in African countries.

Referring to how public institutions acquire and exercise the power to develop public policies and deliver public goods and services, good governance allows for the effective orientation and allocation of public expenditure. At the same time as African countries, particularly those in the CEMAC zone, are seeking to improve their living conditions, they are also aspiring to greater democracy. While it may seem difficult to establish a priori a relationship between the type of political regime and economic performance, it has been shown that the consolidation of democracy requires good economic performance, rather than the nature of the regime. It is rather the country's governance practices that explain the difference in economic performance.

Numerous empirical studies have tested the link between the quality of governance and public spending on education. Of particular note among these studies are those carried out by Nyamongo and Schoeman in 2010 in 28 African countries between 1995 and 2005, and those by Rajkumar and Swaroop in 2002 in Asia based on 72 observations. However, none of these analyses focused specifically on the CEMAC zone, using simple linear regression on panel data as the estimation method. The question of whether governance can affect the composition of public spending is an interesting one. Indeed, although the empirical literature has so far produced mixed results on the effects of public spending and its composition on economic growth, most economists believe that government spending is important for economic performance.

In light of the above, this study aims to analyse empirically the effect of governance through its indicators of corruption, voice and accountability, democracy, government efficiency and political instability on the allocation of public expenditure on education in the CEMAC zone. Thus, one of the particularities of this article lies in its objective. It is one of the first of its kind to attempt to show empirically the specific effect of each of the governance indicators in the CEMAC zone. Although Nyamongo & Schoeman (2010)

carried out their tests for 28 African countries, only Cameroon was included among the six CEMAC countries. What's more, these authors only looked at it very briefly. Moreover, in their work, they used only three governance indicators, namely corruption, political stability and democracy.

As a result, the originality of this article is based on the continuity of the shortcomings of the aforementioned literature. This article therefore appears to be very important for the CEMAC zone and developing countries aiming for sustainable economic development. It thus contributes to the literature by presenting a new dimension that highlights how, in an African context, institutional governance plays a role in the allocation of public expenditure, particularly that linked to education.

To achieve this major objective, the following schedule will be used. Following the contextualisation above, a literature review will be presented, followed by a description of the methodological approach. This will be followed by an analysis of the results and policy recommendations.

2. Literature review

In the literature, several factors have been identified to explain the distribution of the public education budget.

Pacific (2020) shows the impact that corruption has on the fragility of the Central African state, and that this corruption, leading to political instability, disorients the allocation of the state budget to education, with health being the weakest area due to the various coups d'état that have taken place in the country.

Nyamongo & Schoeman (2010) show that education spending in 28 African countries is affected by the level of corruption, with highly corrupt countries devoting a smaller share of their budgets to this vote, that political instability has a negative effect on education spending, but that the degree of democracy has a significant effect on the allocation of education spending.

Education spending is affected by many demographic characteristics. For example, Sheldon (2007), Delavallade (2006) and Stasavage (2005) find in particular that the proportion of the population under 15 is positively correlated with education spending. The reason for this is obviously that the majority of pupils fall into this age category, with education spending going largely on primary education and the first two years of secondary education.

The political environment in a country, as reflected in its human and political dimension of rights, as well as the transparency of public spending, also has an impact on budget allocations to education. As suggested by Delavallade (2006), Stasavage (2005) and Habibi (1992), in an environment characterised by better levels of human resources, rights and democracy, governments would spend more on electorate preferences such as education. Higher levels of education might therefore be expected to be associated with more liberal rights and democracy.

Reinikka & Sevensson (2004) study a school grant programme in Uganda and find that, on average, schools receive only 13% of the grant they are supposed to receive, with local politicians diverting the rest. Consequently, one of the answers to the lack of association between public spending and educational outcomes lies in how much of the budget allocation reaches the schools.

In the models developed by Mahdavi (2004) and Tabellini & Alesina (1988; 1990), the accumulation of debt is a determining factor in the allocation of the public budget. For example, an increase in public debt will tend to increase the share of spending devoted to economic, health and education services, as funds generated by external resources and internal loans are generally channelled to these sectors.

Rajkumar & Swaroop (2002; 2008) examine the link between public spending and governance as measured by the level of corruption and the quality of the bureaucracy in determining the effectiveness of public spending in improving human development outcomes. They find that public spending on primary education is more effective in raising the level of primary education in countries with good governance and that, more generally, public spending has virtually no impact on health and education outcomes in poorly governed countries.

Political instability will trigger budgetary allocation to sectors that are essential for restoring stability. As suggested in the literature (Kimenyi & Mbaku, 1995), a country under constant threat of instability tends to structure its budget allocations in favour of those functional categories that seek to restore stability; obviously, education spending is not one of them. This suggests that politically stable countries will devote more resources to education.

Corruption, considered one of the main indicators of governance, is generally mentioned in the literature as a factor limiting investment and therefore public spending on education. Indeed, a high level of corruption reduces the expected benefits because of the increased costs it induces (Mauro, 1995; Devarajan *et al.*, 1996; Jonhson *et al.*, 2000) show how governments in developing countries have misallocated public spending in favour of capital expenditure to the detriment of current expenditure.

3. Materials and methods

This research follows a positivist approach and a hypothetico-deductive approach based on panel data covering the period 1997-2013 WDI and WGI.

3.1. Emprical model

To examine the effect of different governance indicators on the allocation of public expenditure on education in the CEMAC zone, this work draws on the estimation technique developed by Hewit (1992-1993) used to explain the link between governance and military expenditure. It is a dynamic panel. However, a static panel is used here simply because the individual dimension is smaller than the temporal dimension.

$$PEEit = \beta 0 + \beta 1POP14it + \beta 2DPOPit + \beta 3DBTPUBit + \beta 4ILit + \beta 5STAPOLit + \beta 6EFGOVit + \beta 7CORRUPit + \beta 8GDPPCit + \beta 9REGit + \beta 10VOICE\&RESPONit + \varepsilon it \quad (1)$$

However, to avoid the problem of multicollinearity during these different estimations, the governance indicators presented in the different models in the estimation application will not be mixed. The work will introduce a governance indicator along with the other explanatory variables of the model that are not governance to observe the effect of this indicator. This indicator

will then be withdrawn to reintroduce another governance indicator, again to observe its effect, and so on until all five indicators have been tested individually.

Nevertheless, the measurement of these variables requires prior clarification, as shown in the table below.

Table 1. *Study variables and data sources*

DEPENDENT VARIABLES		
ABBREVIATION	DEFINITION	SOURCE
PEE	Public expenditure on education as % of GDP	WDI
INDEPENDENT VARIABLES		
ABBREVIATION	DEFINITION	SOURCE
DPOP	Population density: Population density is the mid-year population divided by the area in square kilometres. This study suggested it because the more a country has a considerable population, the faster the growth process can be if they have the required level of education. Thus, this variable was taken because the higher the rate of population the more necessary the level of education is.	WDI
POP14	Population aged 0-14, (The population is based on the de facto definition of population, which counts all residents regardless of their legal status or citizenship - except refugees who are not permanently settled in the country of asylum, usually considered the population of the country of origin. This age range is necessary because it is at this level that the basics of education in rigour must begin to be done.	WDI
DBTPUB	Public debt	WDI
IL	Income level	WDI
GDPPC	Gross domestic product per capita	WDI
CORRUP	Corruption	WGI (Kaufman, Kraay & Mastruzzi, 2006).
STAPOL	Political stability	WGI (Kaufman, Kraay & Mastruzzi, 2006).
EFGOV	Government effectiveness	WGI (Kaufman, Kraay & Mastruzzi, 2006).
REG	Regulatory quality	WGI (Kaufman, Kraay & Mastruzzi, 2006).
VOICE & RESPON	Voice and accountability	WGI (Kaufman, Kraay & Mastruzzi, 2006).

Source: authors based on literature

3.2. Estimation test

To examine the effect of governance through its indicators on the allocation of education expenditure in the CEMAC zone, we will carry out preliminary unit root tests, Im, Pesaran and Shin tests compared to the Levin and Lin, Dickey-Fuller or Augmented Dickey-Fuller test because a limitation of the Levin and Lin test resides in the homogeneous character of the autoregressive root under the alternative hypothesis. Then we carry out the different tests of fixed and random effects models followed by the Hausman specification test which is a test dealing with the endogeneity problem. Under the null hypothesis of correct specification, this statistic is asymptotically distributed according to a chi-square with K degrees of freedom, i.e. the number of time-varying factors introduced in the model. If the test is

significant (p-value < 5%), the estimators of the Fixed Effects Model are retained as unbiased. In the opposite case (unlikely), the estimators of the compound error model are retained, as they are efficient.

Table 2. *Result of the IPS unit root test*

Variables	Statistique IPS	Probabilité	Order integration
Public expenditure on education as a percentage of GDP (PEE)	-1.28353	0.0997	I (1)
External public debt to GDP (DBTPUB)	-7.50727	0.0000	I (1)
Population aged 0-14 (POP14) Population density (DPOP)	-3.01408	0.0013	I (1)
Gross domestic product per capita (LPIBH)	-7.68374	0.0000	I (1)
Corruption (CORRUP)	-2.33393	0.0098	I (1)
Government effectiveness (EFGOV)	-4.25634	0.0000	I (1)
Political stability (STAPOL)	-1.93933	0.0262	I (0)
Voice and Accountability (Voice and Respon)	-5.81672	0.0000	I (1)
Regulatory Quality (Reg)	-2.53353	0.0056	I (0)
Public expenditure on education as a percentage of GDP (PEE)	-1.88006	0.0300	I (0)

Source: Authors based on calculations from Eviews8.
Note: I (1) means integrated of order 1, i.e. it needs to be differentiated once to make it stationary, while I (0) means integrated of order 0.

4. Estimation results

The results of this study can be summarised in the table below:

Table 3. *Effect of Governance on Health Education Expenditure*

	DEPENDENT VARIABLE: PEE MODEL				
	VOICE AND RESPONSE	STAPOL	CORRUP	REG	EFGOV
Constant	1,934673	2,358702	1,921123	0,337290	2,331458
	(0,573007)	(0,750714)	(0,576717)	(0,096322)	(0,697015)
Population density	0,074925***	0,068690***	0,074828***	0,072854***	0,071682***
	(3,040815)	(2,9491104)	(3,014505)	(2,980611)	(2,894003)
Population aged 0-14	0,064443	0,063683	0,064602	0,082049	0,046186
	(0,958575)	(1,013061)	(0,968348)	(1,219190)	(0,666294)
Public debt	0,001730	0,002801***	0,001779	0,001834*	0,001611
	(1,603505)	(2,635946)	(1,606242)	(1,716637)	(1,494023)
Gross domestic product per capita	-0,439685*	-0,434028	-0,437184*	-O,350519	-0,346431
	(-1,860761)	(-1,950047)	(-1,753286)	(-1,442526)	(-1,355032)
Voice and accountability	0,003173				
	(0,023405)				
Political stability		0,580357***			
		(3,385028)			
Corruption			0,012068		
			(0,028966)		
Regulatory quality				-0,208336	
				(-1,347392)	
Government effectiveness					0,268602
					(0,9256624)
Hausman test	118,648300	119.098104	79.943630	136.060616	116,086730
Probability	0.0000	0.0000	0.0000	0.0000	0,0000
Hausman test (chi-sq statistic)					
R-squared	0.716074	0.747825	0.716075	0.721626	0,718720

Source: Authors from WGI, WDI.

After estimating the data for our different variables using the Eviews software, it emerges that: in the first column of our estimation table, only one variable explains our public spending as a percentage of gross domestic product, namely population density, which is significant at the one percent level, so the larger the population, the greater the need for education, and so spending is channelled into the education sector.

In the next column, political stability has a positive and statistically significant impact at the 1% level on public spending as a percentage of GDP; it is therefore clearly evident that a politically stable country directs its spending towards productive sectors, including education.

The model used in this study shows that a one per cent improvement in political stability leads to a 0.5% increase in education spending as a percentage of GDP. This result is in line with the work carried out by Nyamongo and Schoeman between 1995 and 2004 in 28 African countries. According to these authors, the more stable a country is, the more it will spend on education, not only from the state but also from the private sector, and a politically stable country attracts foreign investors to invest. These observed results also invalidate what the literature tells us through Kimenyi & Mbaku (1995), which states that a country under constant threat of instability tends to structure its budget allocations in favour of functional categories that seek to restore stability. Education spending is not one of them. This suggests that politically stable countries will devote more resources to education. The countries of the CEMAC zone are partly politically stable, except in a few cases, most notably the CAR.

In this second column of the analysis table, the results also show that population density and public debt are significant at 1%. Once again, we see that the State emphasizes education when it realises that its population is increasing considerably. The public debt that explains education spending as a percentage of GDP can be explained by the fact that the state, having directed most of its spending towards the operating expenditure when realises that the country is politically stable and that its demographic growth is becoming significant, finds itself obliged to contract debts to ensure its future. Tabellin & Alesina (1988; 1990) and Mahdavi (2004), in the models developed show that the accumulation of debt plays a determining role in the allocation of the public budget. For example, higher levels of public debt will tend to increase the share of spending on economic services, health and education, as the funds generated by external and internal loans are generally allocated to these sectors.

However, corruption does not have a significant effect whatever the dependent variable. Corruption in itself does not influence spending decisions in the education sector. Mauro (1998) argues that the education sector offers fewer opportunities for corruption that could influence the flow of funding to this sector.

Furthermore, in the third column, per capita income has a significant effect at the ten per cent level on education spending as a percentage of GDP, but the expected sign does not reflect economic reality. As the literature shows (see Shelton, 2007; Stasavage, 2005; Delavallade, 2006; Nyamongo, 2007 and Mauro, 1998), there is a positive relationship between education spending and the level of per capita GDP. This can simply be explained by the low incomes of economic agents in the CEMAC zone. Not only are they unable to afford good nutrition, and savings for sickness are low, but they prefer to divert their

educational expenditure so that on average one person per family goes to school. Population density, on the other hand, is not only significant at the one per cent threshold but also has the expected sign, so when the number of residents in a country is high, a large proportion of spending as a percentage of GDP is associated with spending on education.

In terms of the government's ability to formulate and implement sound policies and regulations that enable and promote private sector development, the quality of regulation is not significant in our model. It is not significant but the economic sign is negative; it implies that the state is doing everything it can to prevent the private sector from entering this sector, perhaps because it is one of its regalian missions, but the fact that the private sector is reacting despite the profit they are making is still favouring human capital formation in the population, now perhaps the state should impose certain measures on them but not restrict their intervention. In the same fourth column, public debt is statistically significant at the 10% level. This would clearly explain why the State, refusing access to the private sector, prefers to go into debt to support the education sector.

Efficiency is the ability of a person, a group or a system to achieve its ends, and its objectives (or those set for it). Being effective means producing the expected results on time and achieving the objectives set, which can be defined in terms of quantity, quality, speed, costs, profitability, etc. When we look at the last column of the table, we see that government efficiency does not explain education spending as a percentage of gross domestic product at any threshold. It is therefore clear that the objectives set by the State in terms of allocating education expenditure as part of government spending have not been achieved. In the Central African Republic, this can simply be explained by the fact that, as the country is politically unstable, a large proportion of government spending has gone on stabilising order.

Cameroon, the neighbouring country, has lent a helping hand to its neighbour not only by providing financial aid and physical assistance through its army but also by creating facilities to receive refugees from the war in the Central African Republic. We can therefore assume that this financial aid has had a considerable impact on the education spending targets previously set by Cameroon. We realise that the increase in government efficiency of 0.8% of government spending results in 1.6% of education spending in the CEMAC zone, a very low share; this governance indicator is therefore very low in the CEMAC zone, even if it is not significant.

5. Conclusion

The objective of this research, using our static panel estimation method, was to see the effect of the various economic and political governance indicators, namely the level of voice and responsibility, political stability, corruption, government efficiency and the quality of regulations, on the allocation of education spending as a percentage of gross domestic product. Thus, based on the aggregated WDI and WGI data, these estimates show that, apart from political stability, which effectively explains the orientation of state spending towards the education sector, all the other variables are non-explanatory. This simply shows that governance in the education sector is still non-existent or extremely weak in the CEMAC zone. The cause of these results may be due to our different data, which, being from several sources, were also

incomplete and required adjustment methods. Given the insignificance of the governance variables, we can deduce that to increase their growth indicators, it would perhaps be judicious for governments in the CEMAC zone to significantly reduce operating expenditure in favour of education-related expenditure, as suggested by the abundant literature on the favourable axioms of human capital.

In line with the results obtained, it is important to review the policies for financing investment expenditure. To this end, specific bodies should be set up to promote the specialisation of investment in education within governments. In this way, it will be a matter of centralising governance through a process of decentralisation to make these objectives easily applicable through a viable source of existing educational data, but also in the collection of this data at regional, departmental and district levels.

Furthermore, given the inability of central governments to finance the creation of comprehensive education infrastructures, they should create access facilities for private sector agents. In this way, by providing a better framework for the entry and operation of these players, the number of establishments and therefore the level of education should increase

References

Agénor, P.R. (2012). Infrastructure, public education and growth with congestion costs. *Bulletin of Economic Research*, *64*(4), 449-469. doi. 10.1111/j.1467-8586.2011.00395.x

Aliaga, A.O. (2001). Human capital, HRD and the knowledge organization. *Aliaga AO (Eds.)*.

Asongu, S.A., & Odhiambo, N.M. (2020). The role of governance in quality education in sub-Saharan Africa. *International Social Science Journal*, *70*(237-238), 221-238. doi. 10.1111/issj.12253

Barro, R.J. (1991). Economic growth in a cross section of countries. *The Quarterly Journal of Economics*, *106*(2), 407-443. 10.2307/2937943

Becker, G.S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, *70*(5, Part 2), 9-49. doi. 10.1086/258724

Benhabib, J., & Spiegel, M.M. (1994). The role of human capital in economic development evidence from aggregate cross-country data. *Journal of Monetary economics*, *34*(2), 143-173. doi. 10.1016/0304-3932(94)90047-7

Bhuiyan, S.H. (2011). Modernizing Bangladesh public administration through e-governance: Benefits and challenges. *Government Information Quarterly*, *28*(1), 54-65. doi. 10.1016/j.giq.2010.04.006

Bourguignon, A. (1995). Peut-on définir la performance?/Can we define performance. *Revue Française de Comptabilité*.

Conaty, F.J. (2012). Performance management challenges in hybrid NPO/public sector settings: an Irish case. *International Journal of Productivity and Performance Management*, *61*(3), 290-309. doi. 10.1108/17410401211205650

Delavallade, C. (2006). Corruption and distribution of public spending in developing countries. *Journal of Economics and Finance*, *30*(2), 222-239. doi. 10.1007/BF02761488

Denison, E.F. (1962). Education, economic growth, and gaps in information. *Journal of Political Economy*, *70*(5, Part 2), 124-128. doi. 10.1086/258729

Devarajan, S., Swaroop, V., & Zou, H.F. (1996). The composition of public expenditure and economic growth. *Journal of Monetary Economics*, *37*(2), 313-344. doi. 10.1016/S0304-3932(96)90039-2

Engelbrecht, H.J. (2003). Human Capital and Economic Growth: Cross-Section Evidence for OECD Countries. *Economic Record*, *79*(SpecialIssue), S40-S51. doi. 10.1111/1475-4932.00090

Felts, A.A., & Jos, P.H. (2000). Time and space: The origins and implications of the new public management. *Administrative Theory & Praxis*, 22(3), 519-533.

Fouda B.J., Nzongang J., Manhouli B. & Djapou, C. (2022). La fiscalité locale: un levier du développement des CTD camerounaises sous le prisme de la dynamique PNDP. In Nga et Miamo, Décentralisation et développement local au Cameroun: une analyse de la contribution du PNDP, Chapitre 9, 253-274. Harmattan Paris.

Habibi, N. (1994). Budgetary policy and political liberty: a cross-sectional analysis. *World Development*, *22*(4), 579-586. doi. 10.1016/0305-750X(94)90113-9

Hewitt, D.P. (1991). Military expenditure: econometric testing of economic and political influences. *IMF Working Papers*, *1991*(053). doi. 10.5089/9781451847291.001

Hood, C. (1995). The "new public management" in the 1980s: Variations on a theme. *Accounting, Organizations and Society*, *20*(2-3), 93-109. doi. 10.1016/0361-3682(93)E0001-W

Hyndman, N., & McDonnell, P. (2009). Governance and charities: An exploration of key themes and the development of a research agenda. *Financial Accountability & Management*, *25*(1), 5-31. doi. 10.1111/j.1468-0408.2008.00463.x

Johnson, S., Kaufmann, D., McMillan, J., & Woodruff, C. (2000). Why do firms hide? Bribes and unofficial activity after communism. *Journal of Public Economics*, *76*(3), 495-520. doi. 10.1016/S0047-2727(99)00094-8

Kallias, A., Kallias, K., Tsalkamas, I., & Zhang, S. (2023). One size does not fit all: The conditional role of CEO education on IPO performance. *Journal of Business Research*, *157*, 113560. doi. 10.1016/j.jbusres.2022.113560

Kimenyi, M.S., & Mbaku, J.M. (1996). Rents, military elites, and political democracy. *European Journal of Political Economy*, *11*(4), 699-708. doi. 10.1016/0176-2680(95)00029-1

Lucas Jr., R.E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, *22*(1), 3-42. doi. 10.1016/0304-3932(88)90168-7

Mahdavi, S. (2004). Shifts in the composition of government spending in response to external debt burden. *World Development*, *32*(7), 1139-1157. doi. 10.1016/j.worlddev.2004.01.011

Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, *110*(3), 681-712. doi. 10.2307/2946696

Mihaiu, D.M., Opreana, A., & Cristescu, M.P. (2010). Efficiency, effectiveness and performance of the public sector. *Romanian Journal of Economic Forecasting*, *4*(1), 132-147.

Nafukho, F.M., Hairston, N., & Brooks, K. (2004). Human capital theory: Implications for human resource development. *Human Resource Development International*, *7*(4), 545-551. doi. 10.1080/1367886042000299843

Nyamongo, M., & Schoeman, N. (2010). The quality of governance and education spending in Africa. *Southern African Business Review*. 14, 1-23. doi. 10.1080/13678860420000299843

Pacific, Y.K.T. (2020). Fragility of State in Central African Republic: An Econometric Approach to Efficiency Understanding. *Global Business Review*, *21*(3), 681-697. doi. 10.1177/0972150918779291

Rajkumar, A., & Swaroop, V. (2002), Public spending and outcomes: Does governance matter? *World Bank Policy Research Working Paper*, No.2840s. doi. 10.1016/j.jdeveco.2007.08.003

Rajkumar, A.S., & Swaroop, V. (2008). Public spending and outcomes: Does governance matter?. *Journal of Development Economics*, *86*(1), 96-111. doi. 10.1016/j.jdeveco.2007.08.003

Reinikka, R., & Svensson, J. (2004). Local capture: evidence from a central government transfer program in Uganda. *The Quarterly Journal of Economics*, *119*(2), 679-705. doi. 10.1162/0033553041382120

Schultz, T.W. (1961). Investment in human capital. *The American Economic Review*, *51*(1), 1-17.

Shelton, C.A. (2007). The size and composition of government expenditure. *Journal of Public Economics*, *91*(11-12), 2230-2260. doi. 10.1016/j.jpubeco.2007.01.003

Shoup, C.S. (1959). The theory of public finance. American Economic Review. 49(5), 1018-1029.

Stasavage, D. (2005). Democracy and education spending in Africa. *American Journal of Political Science*, *49*(2), 343-358. doi. 10.1111/j.0092-5853.2005.00127.x

Stiglitz, J.E., Sen, A., & Fitoussi, J.P. (2009). Report by the commission on the measurement of economic performance and social progress. [Retrieved from].

Tabellini, G., & Alesina, A. (1988). Voting on the budget deficit. *American Economic Review*, 80(1), 37-49.

Uzun, B., & Celik-Simsek, N. (2018). Land readjustment for minimizing public expenditures on school lands: a case study of Turkey. *Arabian Journal of Geosciences*, *11*, 1-12. doi. 10.1007/s12517-018-3586-3