Impact of Institutional Quality on Tax Revenue in Côte d'Ivoire

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Research Paper 482

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List of abbreviations and acronyms

ACBF African Capacity Building Foundation

ADDR [Autorité pour le Désarmement, la Démobilisation et la Réinsertion]

Disarmament, Demobilization and Reintegration Authority

AGEPE [Agence d'Études et de Promotion de l'Emploi] Employment Research and

Promotion Office

AfDB Africa Development Bank

ATAF African Tax Administration Forum

BIC [Bénéfice Industriel et Commercial] Industrial and Commercial Profit
BCEAO [Banque Centrale des Etats de l'Afrique de l'Ouest] Central Bank of West

African States

CAISTAB [Caisse de stabilisation et de soutien des prix des productions agricoles]

Fund for the stabilisation and support of agricultural products prices CAPEC [Cellule d'Analyse de Politiques Economiques du CIRES]

Economic Policy Analysis Unit of CIRES

CEPICI [Centre de Promotion des Investissements en Côte d'Ivoire] Center for the

Promotion of Investments in Côte d'Ivoire

CIRES [Centre Ivoirien de Recherche Economique et Sociale] Ivorian Centre for

Economic and Social Research

CDI [Centres des Impôts] Tax Centres

CME [Centres des moyennes entreprises] Centre for Medium-sized Enterprises

DEVF [Direction d'Enquête et de Vérification Fiscale] Investigation and Tax Audit

Directorate

DGD [Direction Générale des Douanes] General Directorate of Customs
DGE [Direction des grandes entreprises] Directorate of Large Companies
DGI [Direction Générale des Impôts] General Directorate for Tax Revenues

DGTCP [Direction générale du trésor et la comptabilité publique] General

Directorate of the Treasury and Public Accounting

DPPSE [Direction des Prévisions, des Politiques et des Statistiques Économiques]

Directorate of Economic Forecasting, Policy and Statistics

DUS [Droit Unique de Sortie] Single Exit Tax

FDI Foreign Direct Investment
GDP Gross Domestic Product
IMF International Monetary Fund

ITS [Impôt sur les Traitements et Salaires] Tax on Wages and Salaries

KRA Kenya Revenue Authority

OECD Organisation for Economic Cooperation and Development

PEFA Public Expenditure and Financial Accountability

PND [Plan National de Developpement] National Development Plan

SAP Structural Adjustment Programme SMEs Small and Medium-sized Enterprises

SNGRC [Secrétariat National à la Gouvernance et au Renforcement des Capacités]

National Secretariat for Governance and Capacity Building

SYDAM [Système de dédouanement automatisé des marchandises] Automated

Goods Clearance System

TI Transparency International

TSE [Taxe Spéciale d'Équipement] Special Equipment Tax

UEMOA [Union Monétaire Ouest Africaine] West African Monetary Union

VAT Value-Added Tax

WGI Worldwide Governance Indicators

Abstract

Using Gill's (2000) conceptual framework, the present study is an institutional analysis aimed at explaining the low level of tax revenue in Côte d'Ivoire. It is based on data collected from the *DPPSE* of the country's Ministry of Economics and Finance, from the Central Bank of West African States, from the World Bank, and from various institutional reports and semi-structured interviews carried out with the staff of the two tax administration general directorates in Côte d'Ivoire (the *DGI* and the *DGD*). The study shows how crucial enhanced institutional quality is for raising tax revenue in Côte d'Ivoire, notably revenue from indirect taxes. Indeed, a low level of institutional quality, coupled with high levels of corruption, has contributed to a poor tax-collection performance, which in turn has hindered the two tax administration general directorates' work in terms of tax auditing, tax collection, and tax-base assessment. As a result, there have been low levels of tax returns, payment of the key taxes and recovery of tax arrears. In addition, the magnitude of tax exemptions, and of the informal sector, has led to a reduction in the tax base and has created avenues for corruption within the tax administration system.

Key words: Institutional quality; Tax revenue; Côte d'Ivoire.

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Introduction

Taxation is at the heart of economic development and constitutes a privileged means for governments to get the national resources they need to fund public expenditure. According to Fossat and Bua (2013), developing countries' tax revenues should be their main source of financing of their development, while foreign aid should play a supporting role. Increasing tax revenue is therefore essential for reducing governments' budget deficits (Osoro, 1993). The need to strengthen domestic resources was indeed highlighted by the conclusions of the 2008 Doha Conference on financing for development.

In Côte d'Ivoire, tax revenue mobilization since 2012 has taken place in an environment characterized by several spells of economic growth, with an average growth rate of around 8% per year. This rate exceeded 7% for the seventh consecutive year in 2018, which has made the country's growth one of the fastest on the African continent (FMI [IMF], 2018; Banque Mondiale [World Bank], 2019). But at the same time, the country's development needs - highlighted in the National Development Plan (PND 2012-2015 and 2016-2020) – remain unchanged, in view of the high poverty rate, which requires increased revenue mobilization. It is against this backdrop that only a slight increase in tax revenue (as a percentage of GDP) has been observed, which is not different from its level of 1993 (see Figure 1).

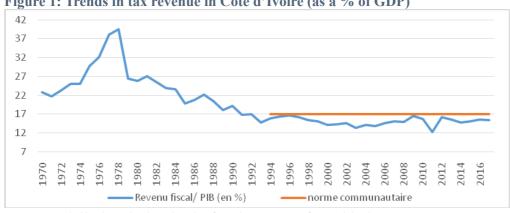


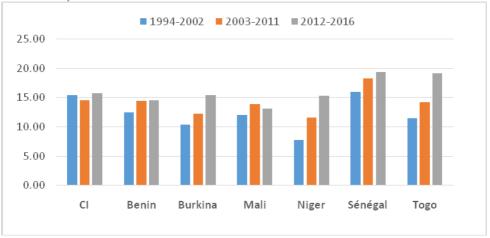
Figure 1: Trends in tax revenue in Côte d'Ivoire (as a % of GDP)

Source: Compiled by the author based on data from the BCEAO 2018 financial database. Note: Tax revenue/GDP (%)

After reaching a high peak in 1978, the tax revenue in Côte d'Ivoire went on downward trend and reached its lowest level in 2000. Despite a slight improvement recorded in 2009 and 2012, the *UEMOA* community standard of at least 17% set for the *UEMOA* region in 1994 has generally remained beyond reach for the country.

Côte d'Ivoire still lags behind the other *UEMOA* countries which operate within the same regulatory and legislative framework in matters of taxation. Its tax collection rate has remained almost the same since 1994, while the rate of revenue collection in the other *UEMOA* member states was on an upward trend between 1994 and 2016 (see Figure 2).

Figure 2: Comparative trends in the tax revenue in the UEMOA countries (as a % of GDP)



Source: Compiled by the author based on data from the BCEAO.

Figure 2 indicates that Senegal's tax revenue rate was the highest in the *UEMOA* region over the three periods. Yet Côte d'Ivoire is the region's main economy, with the largest population and the highest per capita GDP (Table 1). In 2017, Togo, whose per capita GDP represented one-third of Côte d'Ivoire's, recorded the highest tax revenue performance after Senegal. Indeed, Togo, with a tax revenue rate lower than that of Côte d'Ivoire between 1994 and 2002 (it was less than 12% of its GDP), recorded a rate higher than 19% over the period 2012-2016. The rapid economic growth recorded in African countries such as Rwanda, Uganda, Tanzania, and South Africa has contributed to the increase in their tax revenues (Kariuki and Kiragu, 2011). Despite Côte d'Ivoire's status as a regional economic power, its tax revenue performance leaves a lot to be desired.

Table 1: Comparative trends in the socioeconomic indicat	ors of the UEMOA
countries	

	Population, t	Population, total (million)		GDP per capita (constant 2010 US\$)		
	1997	2007	2017	1997	2007	2017
Benin	6.283	8.458	11.176	654.542	752.215	859.953
Côte d'Ivoire	15.446	19.086	24.295	1,382.622	1,207.087	1,632.677
Burkina Faso	10.665	14.252	19.1934	403.217	541.269	688.534
Mali	10.114	13.676	18.542	528.268	675.409	762.226
Niger	10.180	14.668	21.477	331.896	330.633	395.937
Senegal	9.196	11.874	15.851	810.999	985.750	1,134.082
Togo	4.534	5.997	7.798	568.984	480.776	577.382

Source: Banque Mondiale [World Bank] 2018.

These stylized facts are out of phase with the reality in Côte d'Ivoire since the country has been characterized by a continuous increase in its public spending since the end of 2011. Recently, social unrest, including repetitive strikes by civil servants, has forced the country to seek more resources.

According to recent literature, mobilization of internal resources, particularly tax revenues, can be hampered by numerous institutional problems. Research conducted by the International Monetary Fund (IMF) shows that an effective mobilization of domestic resources requires the existence of good institutions in the country. In the case of Côte d'Ivoire, indicators published by various organizations point to a deterioration in institutional quality in recent years. High levels of corruption and a weak rule of law were found to be the most serious institutional problems in Côte d'Ivoire (World Bank, 2012). According to the same survey, corruption was rampant and was visible in various public offices, notably those tasked with tax administration.

The IMF (2018) suggests that Côte d'Ivoire could catch up with the better-performing *UEMOA* member states by mobilizing more revenue through new tax policy measures and accelerated tax administration reforms. To better guide these new measures, it is necessary to analyse the causes of the country's weak increase in tax revenue. Hence the need to answer the following research question: What are the underlying factors, including institutional, that explain this weak increase in tax revenue in Côte d'Ivoire?

The aim of the present study is, therefore, to analyse the role of institutional quality in Côte d'Ivoire's tax collection performance. Specifically, this involves analysing the institutional environment for tax mobilization and assessing its effect on tax collection performance.

The rest of the paper is organized as follows: Section 2 presents the components of tax revenue; Section 3 reviews the relevant literature; Section 4 describes the study's methodology; Section 5 identifies the reasons for the low level of tax revenue in Côte d'Ivoire; while Section 6 is the conclusion and recommendations.

2. Structure of the tax revenue in Côte d'Ivoire

Tax revenue comes from domestic levies and taxes and foreign trade duties and taxes. As Figure 3 shows, until the end of the 1990s tax revenue was highly dependent on customs duties, but this trend has been reversed in favour of domestic taxes since the 2000s. These latter now account for more than half of the country's tax revenue and their share has continued to increase over time: from 51.16% over the period 2000-2011 to almost 53% between 2012 and 2017.

Fiscalité intérieure Revenu de porte 56.00 Eiscalité intérieure Eiscalité de Porte 54.07 54.00 52.75 58 51.16 52.00 56 48.84 50.00 54 52 47.25 48.00 45.93 50 46.00 48 44.00 46 44 42.00 42 40.00 1987-1999 2000-2011 2012-2017

Figure 3: Trends in Côte d'Ivoire tax structure (as a % of the tax revenue)

Source: Auteur à partir des données de la DPPSE

Cette transition fiscale a été perceptible à partir de 2007 où la part de la fiscalité de porte dans le revenu fiscal collecté est demeurée en dessous de 50%.

:Domestic tax revenue includes revenue from direct taxes and indirect taxes (VAT, excise duties, etc.). Direct taxes come from property taxes, income and wages taxes, including those related to economic activities.

Note: Domestic taxes Customs duties

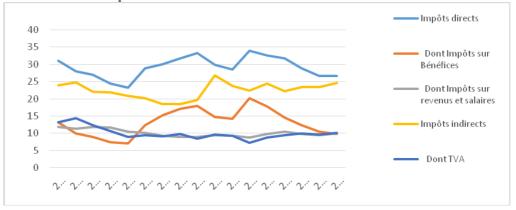
This tax transition was noticeable from 2007 when the share of customs duties in the total tax revenue remained below 50%.

Domestic tax revenue comprises direct taxes and indirect taxes (VAT, excise duties, etc.). Direct taxes include land tax and taxes on income and wages, including those on economic activities (capital gains taxes, etc.). On average, direct taxes represented 29.1% and indirect taxes 22.48% of the total tax revenue over the period 2000-2016. This more balanced structure of domestic taxation differs from that of five *UEMOA* countries. For the latter, the revenue from direct taxes was barely half that from indirect ones (Olivia et al., 2017).

Profit taxes (13.16%) and taxes on income and wages (10.17%) are the main components of tax revenue from direct taxes; regarding indirect taxes, VAT contributes, on average, an estimated 10% of the tax revenue.

As Figure 4 shows, the trends in the share of each type of tax in the total tax revenue reflect their volatility over the period 2000-2016. There was a sharp increase in indirect taxes in 2009 and in direct taxes in 2011. Another highlight concerns the continuous fall in the share of direct taxes after 2011 and, especially, the share of profit taxes in the total tax revenue.

Figure 4: Trends in the share of the domestic tax revenue in the total tax revenue over the period 2000-2016



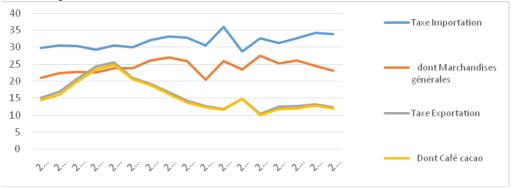
Source: Compiled by the author based on data from the DPPSE.

Note: Among which profit taxes Among which income and pay-as-you-earn taxes
Indirect taxes Among which VAT

In relation to revenue from foreign trade, import taxes represented 31.64% of the total tax revenue for the period 2000-2016 thanks to the large amount of revenue collected from general merchandise (24.2%). Export taxes represented 16% of the total tax revenue and consisted mainly of taxes on coffee and cocoa in the form of a Single Exit Tax (*Droit Unique de Sortie*, *DUS*). On average the *DUS* taxes amounted to 15.6% of the total tax revenue over the same period.

As Figure 5 confirms, the revenue from the *DUS* remains strongly correlated with that from export taxes. The figure shows that after its decline since 2004, the share of the *DUS*-related revenue remained stable from 2012. As for the share of import duties, it increased in 2010 and has increased significantly since 2012.

Figure 5: Trends in the share (in %) of customs duties in the total tax revenue over the period 2000-2016



Source: Compiled by the author on the basis of data from the DPPSE.

Note: Import duties Among which general merchandise Export duties Among which coffee and cocoa

Before looking deeply into these trends in the tax revenue and the structure of this later, let us review the literature on the factors influencing tax collection performance.

3. Literature review

Since the 1980s, the developing countries' implementation of tax reforms with the aim of increasing their revenues has brought about significant changes in their tax structure (Chambas, 2005; Bahl and Bird, 2008). In sub-Saharan Africa, the impact of these reforms has had mixed results. For example, the reforms undertaken in Ghana over the period 1983-1993 were successful in improving the tax system as a whole, as a result of which the tax revenue more than doubled in the two decades that followed (Kusi, 1998; Osei and Quartey, 2005). All this has resulted in increasing indirect taxes at the expense of direct taxes and foreign trade taxes. On the other hand, in Kenya, the positive impact of tax reforms has been higher on direct taxes than on indirect ones (Muriithi and Moyi, 2003). However, according to Osoro (1993), the reforms undertaken in Tanzania over the period 1969-1990 did not enable the country to increase its tax revenue. Similarly, Chipeta (1998) show that despite the tax reforms implemented in Malawi from 1970 to 1994, the country found it difficult to increase the productivity of its tax system.

These studies indicate that, despite the tax reforms undertaken, not all countries in Africa have met their targets in terms of increasing their tax revenue, which has remained insufficient for many of them. This situation has attracted abundant literature on the determinants of increased tax revenue. Pioneer research on the topic (Lotz and Morss, 1970; Chelliah et al., 1975; Heller, 1975) has stressed the role of a country's level of development, its degree of monetization, its trade openness, and the sector-based breakdown of its output as determinants of tax revenue. But this work focussed only on structural factors.

In the early 1990s, economic literature laid emphasis on institutional quality in the process of economic development and, especially, as a factor in explaining the growth differentials between countries. The literature shows that institutional quality promotes economic development (North, 1990; Mauro, 1995). According to North (1990), institutions are defined as the rules of the game in a society and include "formal" rules such as constitutions and the other laws that are to be applied by governments, and informal constraints such as "codes of conduct, standards of behaviour and conventions", which are usually applied by members of the group concerned. That is why more recent studies seeking to explain the developing countries' continuing poor tax revenue performance have analysed the role of institutional quality. They have shown that this is a key factor in tax collection performance.

The first set of such studies highlighted the effect of corruption on tax mobilization and showed that high levels of corruption led to a weak performance in tax revenue

collection, since part of the country's revenue was diverted in the process (Shleifer and Vishny, 1993; Ghura, 1998). For example, Bird (1992) showed that more than 50% of tax revenue remained uncollected due to corruption in developing countries. In addition, corruption undermines civic tax compliance, encourages taxpayers to operate from the informal sector, thus facilitating tax fraud, which in turn weakens the tax revenue collection process (Attila et al., 2007). A 2013 OECD study showed that, in Africa, the level of tax compliance was higher when corruption was under control (OECD, 2013).

Other factors, among which is political stability, have been found to have a positive and significant effect on tax collection performance (Gupta, 2007). On the other hand, political instability leads to a lack of civic tax compliance and a loss of credibility in government institutions, especially those charged with tax administration (Chambas, 2005). Ndikumana (2001) has shown that after the outbreak of conflict in many African countries, not only did the tax base narrow, but also the tax administration became weak. According to the author, civil war was found to be the third factor contributing to the fall in tax revenue in Burundi and Rwanda. Epaphra and Massawe (2017) have shown that political stability, as one of the institutional factors, has a very significant effect on direct taxes and taxes on trade in Africa. Brahima and Ghandi (2018) have suggested that improving institutional quality, which includes fighting corruption and enhancing accountability, can considerably reduce revenue collection inefficiencies in Africa in the short term. Using panel data for the period 1984-2010, Keho (2015) points out that poor institutional quality is one of the causes of the *UEMOA* countries' poor revenue collection performance

In general, most of the research has analysed the impact of institutional factors on tax revenue, most often using general measures of institutions as developed in international databases. Only few studies have so far used specific measures of institutional quality. The present study is one such study. It uses specific measures relevant to the fiscal environment in Côte d'Ivoire and which could enhance the country's tax mobilization capacity and, thus, increase its tax revenue.

4. Methodology

The literature on the effects of institutional quality on tax revenue has used general measures of institutions and has most often focused on a group of countries using panel data. Given that the present study focuses on just a single country, institutional analysis is necessary. This type of analysis makes it possible to identify the possible constraints on internal processes, on relations between institutions or on the entire system, thus hindering policy implementation (Chaty, 1999). The present study's analysis is based on Gill's (2000) conceptual framework, which suggests that a weak tax revenue collection performance may be due to constraints arising directly from the internal process of tax administration or indirectly from external influences. These influences can either complicate or facilitate the tax administration officials' operations of tax revenue collection. Taking into account Côte d'Ivoire's specificities, and based on the literature, the analysis focuses on four potential factors that are likely to explain the trends in the country's tax revenue. The four are: shocks, reforms, institutional quality, and tax administration.

The present study's analysis is based on both secondary and primary data. Secondary data were obtained from various institutional reports, from statistics produced by the Directorate of Economic Forecasting, Policy and Statistics (*Direction des Prévisions, des Politiques et des Statistiques Économiques, DPPSE*), from the tax administration directorates, and from the *BCEAO*. Primary data were obtained from a semi-structured interview guide administered to the heads of central directorates of the tax administration system. The interview bore on the organization, functioning and the work environment, including constraints, of the tax administration system. The list of central directorates whose officials were interviewed and their respective tasks are provided in Appendix 1. The directorates in question were selected based on their tax-revenue-related task, be it tax-base assessment, tax auditing, or tax collection.

5. Reasons for Côte d'Ivoire's poor tax collection

Shocks and tax revenue

Since the early 1980s, several shocks have occurred in Côte d'Ivoire, leading to a decline in the country's tax revenue and to negative economic growth rates. Among them are the economic shock of the early 1980s and the political shocks of 2002 and 2011 (see Figure 6).

1. In the wake of its independence, Côte d'Ivoire experienced a period of strong economic growth until the end of the 1970s. However, from the beginning of the 1980s, the country underwent a persistent depression, within an unfavourable international economic environment characterized by the collapse of commodity prices (cocoa and coffee in the case of Côte d'Ivoire). Faced with this situation, since 1981 the Ivorian Government implemented successive Structural Adjustment Programmes (SAPs) supported by the Bretton Woods institutions (the IMF and the World Bank) to revamp its economy. The aim was to reduce the budget deficit through enhanced revenue mobilization and cuts in spending. Public spending was thus reduced through a sharp reduction in public investment and a relative stability in recurrent expenditure. In relation to tax revenue, several attempts to increase it led to adjustments of the tax rate, including increasing the rate of indirect taxes and extending the range of certain existing taxes. However, these adjustments were not enough to revamp the country's economy or consolidate its tax revenue (Cogneau and Sandrine, 1999). The economy remained characterized by financial imbalances which led to the accumulation of unsustainable debt during the period 1987-1993, at the end of which the country's per capita GDP had fallen to half of its 1980 level. Tax revenue continued to decline, reaching 14.8% of GDP in 1993, the lowest level during that period, while at the same time the GDP growth rate recorded several negative scores between 1980 and 1993.

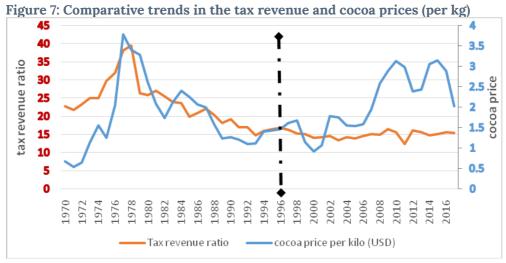


Figure 6: Comparative trends in the tax revenue and the GDP growth rate over the period 1970-2016

Source: Compiled by the author based on data from the BCEAO.

- 2. The second shock concerned the socio-political crisis that occurred in September 2002. Despite many attempts to resolve it, it resulted in the partition of the country into two from 2002 to 2010. In such a political context, tax revenue collection was only possible in the part of the country "under government control". One direct consequence of this was the reduction in the tax base due to the closure of many companies and staff layoffs in the area controlled by the then rebel movement. According to the AfDB/OECD (2003), the country suffered direct-taxes-related revenue losses estimated at nearly CFAF 140 million per day for the sole activities located in the conflict zones. In addition, commercial traffic diminished between Côte d'Ivoire and its land-locked neighbours (Burkina Faso, Mali, and Niger), which opted to use ports in Ghana and Togo. Furthermore, part of the commercial traffic took place informally in the northern part of the country, which led to a drop in tax revenue of more than 8% between 2002 and 2003. Between 2000 and 2006, Côte d'Ivoire's average growth rate was below those for the rest of the UEMOA countries and of sub-Saharan Africa (*FMI* [IMF], 2007).
- 3. The third shock was the post-electoral crisis that ran between the end of 2010 and April 2011. The armed conflict that accompanied it led to the looting and destruction of many services and businesses. This crisis resulted in the suspension of cocoa exports, the closure of almost all commercial banks, the suspension of tax audits and the payment of certain taxes. As a result, in 2010, tax revenue and the growth rate fell from 15.6% and 2%, respectively, to 12% and -4.39% in 2011. In short, in the aftermath of an economic or socio-political shock, the country's tax revenue collection declined. However, there are several indications that other factors beyond those shocks contributed to the low levels of tax revenue as well. The first indication is the non-correlation between tax revenue and cocoa prices

after 1996. Indeed, Figure 7, which shows the relationship between cocoa prices (per kilo) and tax revenue, distinguishes between two periods: the first one, running from 1970 to 1996, shows a positive correlation between tax revenue and cocoa prices. This dependence on government revenue on the often-volatile cocoa prices led to tax revenue instability, which explains its decline until 1993, following the sharp fall in the prices of raw materials from the end of the 1970s. The second period, i.e., after 1996, was marked by a lack of relationship between cocoa prices and the trends in tax revenue.



Source: Based on data from the World Bank and the BCEAO.

The second indication lies in the fact that even when the country was split into two (over the 2002-2010 period), there were spells of an increase in tax revenue, especially in 2009. And the third indication is that, even after the conflict ended in 2012, the amount of tax revenue collected remained almost the same as during the period when the country was still split into two. In a nutshell, the three indications are evidence that factors other than economic and political shocks affect the tax revenue collection process. That is why the present study aims to analyse the role of the reforms undertaken by Côte d'Ivoire.

Economic and tax reforms

The first reforms which the Ivorian Government implemented were the SAPs of the early 1980s. Those reforms generally consisted in increasing tax rates, especially that of indirect taxes (import taxes – with a 30% increase on average, VAT, tobacco taxes, stamp duties, etc.), and in reducing public investment. As a result, from 1988 the VAT base was widened to include certain retail services and activities, while the government decided to reduce the tax and customs exemptions granted under the investment code and the special approvals scheme. Despite these reforms, the tax

revenue collection process had not achieved the expected outcomes by the end of 1993. According to Kouassy and Bohoun (1993), while the government was right in reducing public investment in the short term, it was not in increasing tax rates. Their study shows that tax rates should be low if the target of reducing the public deficit is to be met.

The failure of the SAP reforms led to the devaluation of the CFA franc in 1994, which contributed to improving the tax revenue collection rate, which reached a level higher than 16% of GDP in 1996. The CFAF devaluation was accompanied by measures aimed at broadening the tax base despite the drop in the profit-tax rate from 50% to 35% and a total overhaul of indirect taxes. In addition, with an increase in levies on coffee and cocoa, the share of taxes on these products represented 24% of the revenue collected between 1994 and 1997 (Cogneau & Sandrine, 1999). This led to an upward trend in tax revenue from 1994 to 1996.

Following the 2002 socio-political crisis, and in response to the urgent need to compensate for the narrowed tax base, the reforms undertaken helped to mitigate the effects of the crisis on tax revenue. Those reforms were aimed at supporting the private sector and at improving the tax administration performance, as part of which a standard VAT invoice was introduced in 2005. From 2006, there was a significant increase in tax revenue, to 16.5% of the country's GDP in 2009, its best performance since 1997. After the 2011 crisis, the main reforms undertaken concerned the cocoa sector and the investment code.

The cocoa-sector reforms

The cocoa reforms consisted in the producers and the government modifying the prices of cocoa on the international market. A price system managed by the stabilization fund *CAISTAB* was in force from 1960 to 1999. This period was characterized by a large government share (the export *DUS*). For example, between 1960 and 1979, the guaranteed producer prices represented only 47% of the export prices (World Bank, 2017). Following the economic difficulties that started in 1980, the liberalization of the sector (including the abolition of *CAISTAB* in 1999) resulted in replacing the guaranteed producer prices by indicative prices. Under the new policy, cocoa producers received, on average, only 41% of the international market prices from 2001 to 2009, which was a lower share than that of the producers in countries such as Ghana (70%), Nigeria (90%) and Cameroon (85%), between 2007 and 2008 (World Bank, 2017).

Faced with this reality, from November 2011 the Ivorian Government abandoned this indicative-price system to return to the guaranteed minimum producer price in order to improve the cocoa producers' living standards. As a result, the producers' share was revised upwards to a minimum threshold of 60% of the international market prices, while the government's share was set at a maximum tax rate of 22%. This reform has contributed to the drop in the share of the *DUS*-related revenue since 2012 (Figure 8).

Figure 8: Trends in the share (in %) of customs duties in the total tax revenue over the period 2000-2016



Source: Compiled by the author based on data from the DPPSE.

Note: Export taxes Among which those on coffee and cocoa

----- Guaranteed minimum price reform

The investment code reform

In order to improve the business climate, since 2012 the government has implemented several reforms, among which the adoption of a new investment code. The purpose of this code was to create an environment that was conducive to attracting investors after the military-political crisis. It is a code that offered more guarantees and advantages to investors than the previous one. Specifically, the code reduced the minimum investment thresholds for the SMEs and instituted accelerated procedures for the granting of advantages. This saw the number of beneficiaries increase, a fact which seems to be corroborated by the increase in approvals granted by *CEPICI* and by an increase in FDI, from 0.8% to 1.4% of the country's GDP between 2017 and 2018 (World Bank, 2019). At the same time, this new code, which offered generous exemptions to many firms, has contributed to the fall in the share of the *BIC*-related revenue in the total tax revenue since 2012. This fall in *BIC* revenue has led to a drop in the share of direct taxes in the total tax revenue in favour of indirect taxes (Figure 9).

Figure 9: Share of the different components of the domestic revenue in the total tax revenue

Source: Compiled by the author based on data from the DPPSE.

Furthermore, the sub-components of the "paying taxes" indicator of Doing Business 2018 reveal that the share of the *BIC*-related revenue is the lowest, not only among the types of direct taxes paid by businesses in Côte d'Ivoire, but also among sub-Saharan African countries (Figure 10).

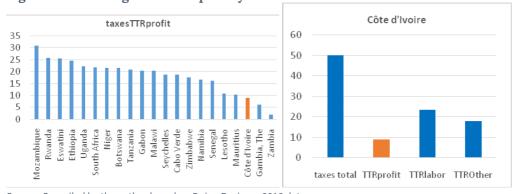


Figure 10: The weight of taxes paid by businesses

Source: Compiled by the author based on Doing Business 2018 data.

Beyond the effect of the reforms described above on tax revenue, it is also necessary to examine the effect of the tax administration in Côte d'Ivoire.

Tax administration in Côte d'Ivoire

The Tax General Directorate (*Direction générale des impôts, DGI*) and the Customs General Directorate (*Direction générale des douanes, DGD*) are the two main organs tasked with achieving the tax revenue targets set in the finance law. On behalf of the

central and the local governments, the two tax administration organs are charged with the collection of domestic taxes (for the *DGI*) and customs duties (for the *DGD*). Since the *DGI* is charged with both tax-base-related and domestic-tax-related operations, the General Directorate of the Treasury and Public Accounting (*Direction générale du trésor et la comptabilité publique*, *DGTCP*) is charged only with non-tax revenue and with accounting for coverage fees and collection fees. The organizational structure and the tasks assigned to each of the tax administration organs (in Appendix 3) are stated in Decree No. 2016-869 of 3 November 2016 repealing Decree No. 2011-222 of 7 September 2011 relating to the organization of the parent ministry.

Characteristics of the tax administration in Côte d'Ivoire

The organizational structure

As is the case in most French-speaking countries in sub-Saharan Africa, Côte d'Ivoire's DGI and DGD are both under the supervision of the budget ministry. The two general directorates are each headed by a managing director with two deputy managing directors. Having either directorate to be under the ministry of finance, a practice called the "traditional model", is different from the more recent model of having either of them as a semi-autonomous agency or revenue bureau. The latter model has been adopted in many English-speaking countries in sub-Saharan Africa and in some French-speaking countries like Burundi and Togo (see Appendix 2). For example, the Togo Revenue Bureau (Office Togolais des Recettes) is the first of its kind in French-speaking West Africa and has been operational since 2014. It has merged its tax and customs services into a single body in order to streamline revenue collection, reduce administrative costs and increase revenue. According to ATAF (2016), the semi-autonomous bureau model has the advantage of introducing more flexibility in the management of resources with different levels of autonomy. In contrast, the traditional model lacks flexibility in matters related to budget and human resource management, and in the organization of its services (Chambas, 2005).

In its internal organization, Côte d'Ivoire's tax administration structure has undergone several restructurings. From being a tax-centred organization before the 1990s, it was restructured into a function-centred organization (charged with registration, collection, auditing, communication, etc.) with specialized services for the management of homogeneous groups of taxpayers. In the case of the *DGI*, the specialized services are the Directorate of Large Enterprises (*Direction des Grandes Entreprises*, *DGE*), the Centres for Medium-sized Enterprises (*Centres des Moyennes Entreprises*, *CME*), and the Tax Centres (*Centres des Impôts*, *CDI*). The setting up of the *DGE* in 1997 has generally been seen as a priority so as to secure the domestic tax revenue and facilitate the implementation of major tax reforms as part of the structural reform programmes supported by the IMF (Chambas, 2005). In this connection, two CMEs were set up in 2014 and two more in 2016, with the aim of strengthening the management and supervision of medium-sized companies. On the other hand,

another organizational strategy was adopted by the *DGI*: the setting-up of the land tax administration, which led to the proliferation of services dedicated to the land tax, with the creation of services for land-tax assessment and collection in 2011.

Human, material and financial resources

The human resources

The recruitment of the tax administration personnel is the responsibility of the ministry in charge of the public service, which receives staff requirements from different ministries for the different positions to be filled. Regarding the recruitment of the *DGI* and *DGD* managing directors, it is based on the applicants' merit and skills, following a call-for-candidatures procedure introduced in 2001 for the two tax administration positions. However, recently, in 2016, this procedure was only implemented for the recruitment of the *DGI* managing director. According to CAPEC (2015), a managing director appointed through a call-for-candidatures is likely to be more competent and to be free from any partisan leaning, which will enable him/her to effectively manage the organization based on a culture of performance.

Since the end of the 2011 post-election crisis, as part of the programme of the Authority for Disarmament, Demobilization and Reintegration (*Autorité pour le Désarmement, la Démobilisation et la Réinsertion, ADDR*), a number of public servants have been integrated into the tax administration system without competition, unlike in the case of the tax personnel. This circumstance-based recruitment helped to increase the number of staff, which led to an increase in the growth rate in 2013 for the *DGI* and in 2015 for the *DGD*. In 2015, the staff at the *DGD* comprised 91.35% of customs officials, and that at the *DGI* 53.61% of tax specialists (Figure 11).

system 4500 4000 3500 3000 2500 53.6 2000 1% 1500 1000 500 0 FISCALISTES 2010 2011 2012 2013 2014 2015 2016 Fonctionnaires Douaniers NON FISCALISTES Autres Fonctionnaires ■ DGI ■ DGD Source: Compiled by the author based on data from the DGI and the DGD. Note:

Figure 11: Trends in and breakdown of the staff in the tax administration

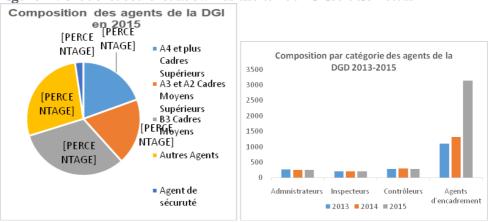
GDI Tax specialists Customs personnel
DGD Tax non-specialists Other officials

The distribution of officials according to the categories shows that, while the *DGI* staff are high-ranking ones, the *DGD* staff are mainly made up of low-ranking officials charged with implementing orders (Figure 12).

In fact, the integration of 1,920 low-ranking officials from the *ADDR* in 2015 more than doubled the number of such officials, who accounted for 80.74% of the customs staff. The relative importance of senior executives in the total tax administration workforce increases the system's flexibility and strengthens its capacity to modernize its working methods (CAPEC, 2015).

Once recruited, only the well-trained staff can adapt easily and participate more effectively in the tax administration modernization scheme. However, the number of trained staff has remained low over the years and the annual training scheme is implemented only partially. Between 2008 and 2016, the highest number of trained officials was only 26% among the *DGI* staff, while only 436 *DGD* officers were trained in 2016.

Figure 12: Grade-based breakdown of the tax administration staff



Source: Compiled by the author based on data from the DGI and the DGD.

Note: Breakdown of the DGI staff in 2015 Breakdown of the DGD staff from 2013 to 2015

A4 level and higher: senior executives Managers Inspectors Controllers Implementer staff

A3 and A2 levels: middle senior executives

B3 level: middle executives Other officials

Security personnel

It transpires from the figure that the number of trained officials has not changed since the post-crisis period despite the circumstance-based recruitment which occurred as part of the reintegration of the ex-combatants. According to ACBF (2015), Côte d'Ivoire suffers from a lack of human resource capacity in its tax administration system. It also lacks a system for monitoring and evaluating trained officials, which is an obstacle to improving the quality and relevance of the content of the training programmes. The major constraints on the training activities are the insufficiency and the late availability of the budgetary funds allocated to the implementation of the training schemes and the inadequate equipment at the training institutes (as revealed by the results of interviews).

Material and financial resources

Material and financial resources are given to each of the tax administration directorates to enable them to achieve the objectives assigned to them by the government. It is in this context that the Special Equipment Tax (*Taxe Spéciale d'Équipment, TSE*) was instituted in 2001 to enable the *DGI* to meets its equipment and investment needs. The distribution method and the relative autonomy in the management and use of those resources are left to each tax administration general directorate.

Since the 2000s, ICT, which has become a key instrument for tax mobilization, has enabled each tax administration general directorate to have a directorate set up to design, develop and maintain specialized ICT applications. However, the *DGI* ICT application, called *GUOAR*, does not yet cover all its services; nor is there always network connection (according to interview results). In addition, the needs in equipment are hardly met, especially in terms of offices and their equipment. The lack of office equipment in the central directorates of the two general directorates impedes the achievement of their missions of monitoring and supervising operational services. They are content with online exchanges (according to interview results). The lack of resources and computers in certain offices limits the effectiveness of their procedures (Perret et al., 2016).

Taxpayer services

Taxpayer services help facilitate the taxpayers' fulfilment of their tax obligations. Each tax administration general directorate has a communications section which was upgraded to a central directorate in 2009. Each communications directorate's activities comprise getting in touch with taxpayers, sensitizing them, and training and educating them through television programmes, advertising spots, distribution of explanatory brochures, and the provision of information on its website. For example, the *DGI* has been running a television programme since 2001 and a radio broadcast since 2007. And in 2006, civic tax compliance was introduced into the teaching programmes for primary and junior secondary school. In the long term, tax education contributes to reducing the penalties for taxpayer non-compliance, to fighting tax evasion, promoting compliance with tax obligations and, thus, increasing tax mobilization (ATAF, 2016). The *DGD* also has a framework for communicating with its partners (approved customs brokers and big importers and exporters).

The two tax administration general directorates charged with collecting revenue still have difficulty in achieving the targets they have been set by the government. As shown in Figure 13, over half of the period 2002-2016, the revenue collected by each of the tax administration general directorates remained below the set targets.

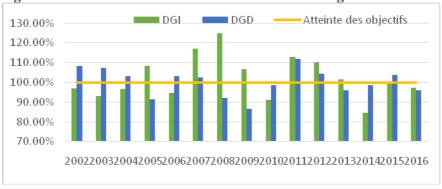


Figure 13: Rate of achievement of the tax revenue targets

Source: Compiled by the author based on data from the tax administration directorates.

Note: DGI DGD Achievement of revenue targets

That was the case in 2014 where the achievement rate for the *DGI* only amounted to 84.7%. The difficulties in the two branches (*DGI* and *DGD*) of the tax administration system in Côte d'Ivoire achieving the set revenue targets, coupled with the almost steady trends in tax revenue since 2012, cause the present study to turn its attention to the major obstacles the two face in collecting tax revenue.

Obstacles to tax revenue collection

A narrow tax base

One factor that weakens the tax base in Côte d'Ivoire is the size of the informal sector, which remains the largest job provider in the country. From 22% of jobs in 1990, to 25% in 1995, its employment rate rose in 2012 to 89.4% of jobs against 4.9% only from the formal private sector and 3.9% from the public sector (*AGEPE*, 2013). The informal sector's share in Côte d'Ivoire's GDP stands at 89% against 40% in Togo's and 64% in Niger's. This preponderance of the informal sector is mainly related to agricultural activities. When these are excluded, the share of informal employment drops to 46% (Olivia et al., 2017). This underscores the under-taxation of economic activities in Côte d'Ivoire, notably agricultural ones. Keho (2015) shows that the share of agriculture has a negative effect on tax revenue performance in the *UEMOA* countries because their agriculture is largely of the subsistence type and is difficult to tax. One of the consequences of this economic structure is that more than half of the taxpayers who make up the *DGI*'s tax structure are governed by the single combined tax system (Table 3).

Table 2: Breakdown of the DGI taxpayers by tax type

	2011	2012	2013	2014	2015	2016
DGI taxpayers	51,136	64,637	69,087	80,335	73,945	78,215
RNI	24.6%	19.7%	20%	17%	17%	16%
RSI	21%	21.9%	23%	23%	25%	27%
Combined single tax	54.4%	58.4%	58%	58%	56%	53%

Source: Compiled by the author based on data from the DGI.

However, the weight of this type of tax does not even reach 1% of the *DGI*'s revenue, and only less than 50% of its taxpayers pay the bulk (99%) of the tax revenue it collects.

In addition to the weight of the informal sector, the tax-exemption measures taken by the Ivorian Government have narrowed the tax base by reducing the number of taxpayers who really matter. The exemptions in question represent more than 2% of the country's GDP. In fact, reducing them would increase its tax revenue by at least 1% of its GDP annually. The narrowing of the *DGD* tax base is higher than that of the *DGI* because of customs exemptions, which represent more than 70% of the total exemptions.

Table 3: Tax and customs duties exemptions over the period 2011-2017

	2011	2012	2013	2014	2015	2016	2017
Exemptions (% of GDP)	1.43	1.67	2.09	2.45	2.99	2.40	2.52
DGI	50.18	22.63	36.27	25.75	28.52	34.33	27.84
DGD	49.82	77.37	63.73	74.25	71.48	65.67	72.16
VAT	8.06	19.45	22.24	18.36	65.80	63.41	55.80

Source: Compiled by the author based on data from the DGI and the DGD.

By tax type, the VAT tax represents the largest share of the total exemptions, more than 60% since 2015 (Table 4). In 2017, the exemptions mainly came from the provisions resulting from agreements with the government (38.4%), from sector-based codes (oil and mining sectors) which represented 22% of the exemptions, from the investment code schemes (18.7%), and from the general tax code (9.8%).

Not only does the magnitude of the exemptions pose management problems for the tax administration system, but it also creates opportunities for corruption. As Table 5 shows, in relation to the types of tax offences observed between 2013 and 2015, the proportion of abuses of tax exemptions noted by the Customs Investigations Department continued to increase. This proportion constituted 11.15% of the number of infringements in 2015 and 30.08% of the amount lost.

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		2013	2014	2015		
Number of contentious cases (CCs)		433	341	287		
Amount lost (AL: in CFAF million		6,873	9,226.1	17,415		
	% of CCs	5.31	6.45	11.15		
Tax exemption abuses	% of AL	5.62	9.58	30.08		

Table 4: Types of tax offences pointed out by the Customs Investigations Department

Source: Compiled by the author based on data from the DGD.

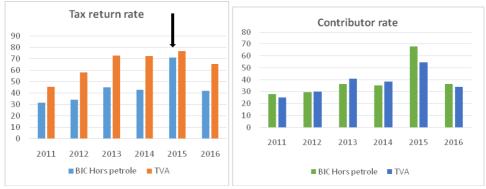
With a narrow tax base, an effective control by the tax and customs services is necessary in order to enhance the revenue collection efficiency. However, the tax administration authorities in Côte d'Ivoire do not seem to see things this way.

Weaknesses in the tax control system

The tax structure in Côte d'Ivoire is not controlled enough. Only about 2% of the names in the taxpayer register get controlled. In addition, the application of the penalties for the tax offences observed during the control is not strict enough, as the fine is often lower than the amount lost. The practice of having recourse to an out-of-court settlement is more frequent than having to pay the legal fines (RCI, 2012). This amicable-settlement practice causes huge losses of revenue and encourages tax fraud. The shortage of staff at both the *DGI* and the *DGD* limits the efficiency of their daily operations (according to interview results). The creation of land tax services resulted in a significant redeployment of staff from the so-called "miscellaneous taxes" services to newly created ones has greatly reduced the staff in the audit sections. This organizational strategy adopted by the *DGI* resulted in the deterioration of the management of other taxes, leading to high default rates. Yet the share of the land tax remains marginal in the *DGI*'s tax revenue (around 4%), even though it has grown annually at an average rate of more than 10% since 2012.

Over the period 2011-2016, the contributor rate, as well as the tax return rate for the leading taxes such as the VAT and the profit tax, was less than 50% of the taxable people (Figure 14).

Figure 14: Trends in the tax-return rate and the contributor rate between 2011 and 2016



Source: Compiled by the author based on data from the *DGI*. Note: *BIC*, excluding oil revenue VAT

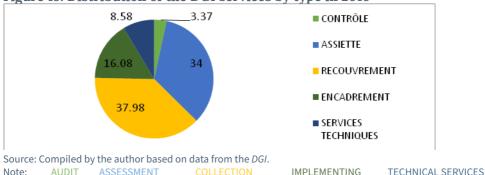
BIC, excluding oil revenue

VAT

During the year 2015, which was declared the "tax audit year", efforts were made to raise the tax collection rate to 3% of the taxpayer register (according to interview results). As a result of these efforts, there was an increase in the contributor rate, which reached more than 50% for the VAT and the profit tax in 2015. The tax-return rate also rose, reaching 70% for the profit tax. These increases are evidence that tax control is crucial to enhancing tax compliance and, thus, to increasing the amount collected.

The limited number of services dedicated to the tax audit also weakens the tax control operations. In fact, the tax-control services constitute the smallest share of the *DGI* services: less than 4% in 2016 (Figure 15). This means that the number of tax auditors and tax control services remains too inadequate to ensure an adequate tax audit.

Figure 15: Distribution of the DGI services by type in 2016



Beyond the constraints described above, the results of the public finance management performance evaluation have revealed weaknesses in the tax administration system. This evaluation, which used the PEFA (Public Expenditure

and Financial Accountability) approach, was initiated by the Ivorian Government with the support of its international technical and financial partners. The first phase of the evaluation took place in 2008 and the second in 2012. The main indicators, each of which has three components, are: a) transparency in the taxpayers' tax liabilities and obligations (PI-13); b) efficiency of the measures for taxpayer registration and for auditing the taxes, levies and customs duties (PI-14); c) efficiency in the collection of tax and customs contributions (PI-15). These main indicators are appraised using the following ordinal letter grades: A, B+, B, C+, C, D+, and D. A, the highest score, refers to the best performance by those in charge of tax administration, while D, the worst score, refers to their worst performance.

The table in Appendix 4 presenting the results of the two-phase evaluation reveals that, while there was progress regarding the indicators PI-13 and PI-14, the PI-15 indicator registered a very low score (D+) which remained unchanged between 2008 and 2012. This means that if the collection of tax and customs contributions is still inefficient, that has to do with the sub-component of it called "tax arrears recovery rate". This reality is revealed in Table 5, which indicates that between 2015 and 2016 the amount of the "remaining arrears to be recovered" doubled and the rate of its recovery stood at 51%, which was lower than that of the arrears taken over.

Table 5: Amount of arrears (in CFAF billion) and recovery rate

	2015	2016
Initial amount of arrears	24.9	52.9
Recovery rate	66.8%	51.9%
Amount of arrears taken over	78.5	104.3
Recovery rate	80.2%	80.4%

Source: Compiled by the author based on data from the DGI.

The analysis (in the preceding paragraphs) of the internal workings of the tax administration system has highlighted the obstacles this system faces and its weaknesses, both of which contribute to its poor performance. But this poor performance may also result from the institutional environment in which the tax administration system operates.

Institutional quality and tax revenue

The present study uses the World Bank's Worldwide Governance Indicators (WGI) as a proxy for institutional quality. They are: "control of corruption", "political stability and absence of violence", "rule of law", "government effectiveness", "regulatory quality", and "voice and accountability." Each indicator is assigned a score ranging from -2.5 (poor institutional quality) to 2.5 (good institutional quality). When tax revenue is related to each of these indicators in the case of Côte d'Ivoire, it appears that all of them are positively correlated to it (Figure 16). Thus, good institutional quality is crucial for a country's good fiscal performance. However, the negative

scores for each of these indicators since 1996 are an indication that a poor tax revenue performance comes in part from poor institutional quality. This is how, for example, the positive link illustrated in Box A between the indicator "control of corruption" and tax revenue is to be interpreted. The level of corruption is still considerable in Côte d'Ivoire, as indicated by the negative scores for it since 1996. In 2017, Transparency International (TI) ranked the country 103^{rd} out of 180 countries, with a score of 36 out of 100. Further, 73.6% of the firms interviewed as part of the 2016 World Bank survey said that corruption constituted a major obstacle to the conduct of their operations in Côte d'Ivoire, a percentage that is much higher than the regional average for sub-Saharan African countries (41.6%).

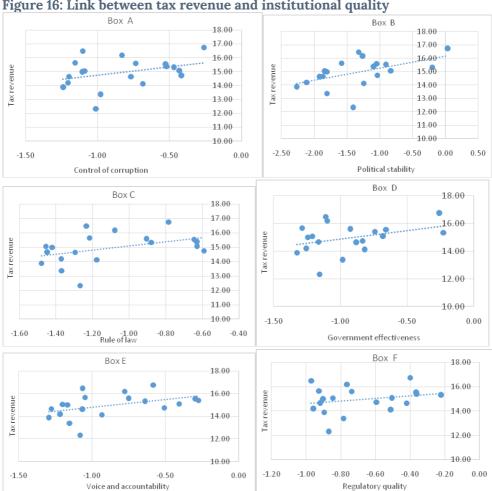


Figure 16: Link between tax revenue and institutional quality

Source: Compiled by the author based on data from the World Bank and the BCEAO.

Legitimization of corruption and the impunity vis-a-vis it foster its spread in the country. Cases of corruption often reported by the national press are not seriously taken into account by the country's anti-corruption institutions (Gnomblérou, 2015). In 2017, 58% of the population in Côte d'Ivoire still thought that the government was not fighting corruption effectively, against only 31% who thought it was (Afrobarometer, 2019). Such public opinion is not conducive to enhancing tax compliance. The country's tax administration system remains one of its most corrupt public sectors (Transparency International, 2016). This corruption manifests itself in the form of bribes in transactions between taxpayers and tax administrators. For example, the customs clearance of goods generally requires the payment of very high commissions, which most often results in containers being immobilized for months at the Abidjan port due to corruption in the customs services (Transparency International, 2016). The excessive customs duties charged are a major incentive for negotiating and reducing import costs through corrupt practices in the Ivorian customs administration system

(Brookings Institution, 2016). Corruption is also practised in the form of assistance to taxpayers in exchange for bribes when tax procedures are complicated. For example, the procedures for VAT refunds are still complex in Côte d'Ivoire (Figure 17).

taxesTimeComplyVATrefund

taxesTimeComplyVAT

Figure 17: Time (in hours) taken to complete VAT credit refund procedures

Source: Compiled by the author based on data from Doing Business 2018.

As the Doing Business 2018 "paying tax" sub-indicator reveals, the time spent completing VAT credit refund procedures is longer in Côte d'Ivoire than in the other sub-Saharan African countries: for example, only six hours in Cape Verde and seven hours in Mauritius, against 64 in Côte d'Ivoire. This can only create opportunities for corruption within the country's tax administration system where bribes are "common". For example, in 2016, 22.9% of businesses in Côte d'Ivoire were reported to have paid bribes to tax officials at meetings. This percentage was the second, after Mali's 32.1%, in sub-Saharan Africa, whose average was 17.7%.

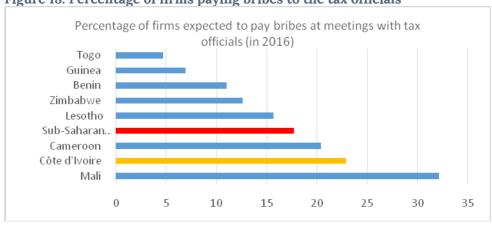


Figure 18: Percentage of firms paying bribes to the tax officials

Source: Compiled by the author based on World Bank data.

Box B in Figure 16 enables us to see the positive effect of political stability on tax collection performance in Côte d'Ivoire. Strong political stability in a country is important to boost, not only its economy, but also its tax collection performance. As was seen earlier in this section, Côte d'Ivoire experienced a period of political

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shocks (the socio-political crisis of 2002 and the post-election crisis of 2011) which was characterized by a significant drop in its tax revenue.

In Box C in Figure 16 the positive link between the rule of law indicator and tax revenue is clear. A sub-component of this indicator concerns the judiciary. Tax disputes between the tax authority and taxpayers are common and a large backlog of tax cases threatens revenue collection. That is why it is important to resolve tax disputes independently, quickly and fairly. Yet, the judicial system in Côte d'Ivoire is perceived to be among the most corrupt institutions in the country where bribes are frequently solicited. In the 2016/2018 Afrobarometer survey, 68% of the respondents believed that most judges and magistrates were involved in corrupt practices (Transparency International, 2018). In addition, there are no specialized courts to deal with corruption cases in Côte d'Ivoire. According to the World Bank (2012), 56.6% of civil servants consider that illicit payments are widespread in customs procedures as well as in those involving the judicial system (55%). According to the same study, judicial procedures appear to be very problematic due to the long time they take, the complexity of judicial processes and the lack of transparency within the sector. Further, the justice system is vulnerable to interventions from the executive, as believed by 60% of those interviewed. And this lack of independence on the part of the justice system is reflected both in its decisions and in its doctrine (Transparency International, 2016). Its negative scores of until 2017 show that the situation is still critical.

Table 6 shows the correlation between the components of tax revenue and institutional quality. It appears that the positive link between tax revenue and institutional quality is essentially related to indirect taxes, notably the revenue from indirect taxes collected by the *DGI* and import duties collected by the *DGD*. This positive link is stronger and significant for import duties with all the indicators of institutional quality, especially "voice and accountability", "rule of law", and "control of corruption".

Table 6: Correlation between the tax revenue components and institutional quality

	Voice and accountability	Political stability	Government effectiveness	Regulatory quality	Rule of law	Control of corruption
DGI	0.2879	0.3164	0.0091	-0.0111	0.2790	0.1529
Direct taxes	-0.0150	0.1302	-0.1567	-0.1857	-0.0303	-0.0653
Indirect taxes	0.5551*	0.4241*	0.2157	0.2147	0.5580*	0.3675
DGD	0.2057	0.3465	0.4371*	0.2776	0.2302	0.3303
Imports	0.7829*	0.5686*	0.4622*	0.4649*	0.7883*	0.6329*
Exports	0.4690*	-0.3271	-0.0463	-0.1406	-0.4475*	-0.2380

Source: Compiled by the author based on data from the World Bank and the DPPSE.

It transpires from Table 6 that enhancing institutional quality would boost revenue from indirect taxes, which is a major component of tax revenue. A sub-component of the "voice and accountability" indicator relates to citizens' trust in institutions, which remains low in Côte d'Ivoire. A diagnostic survey by the World Bank has

indicated that the tax administration structures (the *DGD* and the *DGI*) are among the entities perceived to be dishonest in the country, besides the courts and the police. People's views collected in Afrobarometer 2018 confirm this perception (Transparency International, 2018).

Compared with Senegal, the performer in tax collection matters in the *UEMOA* region, Côte d'Ivoire scores less well on each one of the institutional quality indicators (Appendix 5).

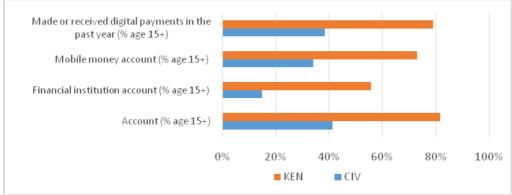
Given the importance of improving the institutional environment, the recent digitization reform within the tax administration system is an important step forward. Indeed, since January 2017 the implementation of the e-procedure project by the *DGI* now allows taxpayers governed by the *DGE* and the *CME* to complete and submit their tax returns and make their tax payments online. Digitization of services is beneficial, since it reduces corruption by reducing the amount of interaction between tax officials and taxpayers. This reform has also been developed in many countries in sub-Saharan Africa, with some of them having set up mobile payment systems that taxpayers can use to complete and submit their tax returns and payments (ATAF, 2016).

In this connection, Kenya is a success story: in this country, the revolution in payment methods to and from the government has enabled a more efficient implementation of simplified platforms for paying taxes. Taxpayers no longer have to go to the tax administration offices (the Kenya Revenue Authority, [KRA]) or to their bank to pay their taxes; they can file their tax returns and pay their taxes electronically and often with mobile money. This reform has allowed the country to, not only have an effective and efficient tax administration system, but also to have a broad tax base, with the introduction of an excise tax on cash transfers. Digitization has also enabled the KRA to reduce the cost of revenue collection (a cost which has gone down since 2011) and to increase transparency in its operations (Njuguna, 2017).

The risks of corruption and fraud have thus decreased with the reduction in taxpayer-tax-official interactions. Findings of the Afrobarometer survey show that the number of respondents who believed that most tax officials were corrupt fell from 38.2% in 2008 to 23.5% in 2015 in Kenya. All of this helped to increase tax revenue. Thus, Kenya's tax revenue, whose average rate was 18.1% between 2005 and 2013 before the introduction of the iTax system in September 2013, increased from 19.1% in 2014 to 20.3% in 2016. In addition, the revenue collected in 2016 via the KRA M-Service was more than 13 times that collected in 2014 (Njuguna, 2017).

Even though it is still too early to ascertain its effectiveness on tax collection performance in Côte d'Ivoire, the digitization reform is expected, not only to reduce corruption, but also to streamline and ease the tax procedures in the country. To achieve its goal, this reform should be accompanied by measures aimed at facilitating financial inclusion. As Figure 18 shows, in 2017, while 82% of the population in Kenya had a financial account and 73% had a mobile money account, only 41% and 34%, respectively, did in Côte d'Ivoire.





Source: Compiled by the author based on data from Demirgüç-Kunt, A., L. Klapper, D. Singer, S. Ansar and J. Hess. 2018: the World Bank's "Global Findex 2017".

6. Conclusion and recommendations

Despite Côte d'Ivoire's economic performance and the reforms that the country has implemented, its tax revenue collection rate is still low. And it has remained almost stable over the years and below the UEMOA region's standard by at least 17%, while the tax revenue in the other UEMOA member states has been on an upward trend. The present study's aim was to explain the specific nature of the trends in Côte d'Ivoire's tax revenue. It has underscored the fact that weak institutions, coupled with economic conditions, have contributed to the poor tax performance. Indeed, after breaking with its heavy dependence on the prices of raw materials after 1994, the country has collected its tax revenue in an environment characterized by various socio-political shocks, high levels of corruption, a non-transparent judicial system, and low confidence in institutions (including the very ones charged with tax administration), all of which have led to a low level of tax compliance. The country's tax administration organs have been inefficient in their operations (tax-base assessment, tax control, tax collection). In addition, the magnitude of the tax exemptions and the complexity of the tax-paying procedures have fostered corruption and fraud within the tax administration system, while at the same time there are not enough tax audit staff in the country.

The study has thus revealed that improving the quality of the country's institutions is necessary for it to enhance its tax revenue collection capacity. This enhanced capacity will enable Côte d'Ivoire to increase the amount of money collected from the major component of its tax revenue, namely indirect taxes, especially import taxes and indirect domestic taxes.

The Ivorian Government should, therefore, continue to improve the quality of its institutions. The digitization of tax operations at the *DGI*, which started in 2017, should also extend to the *DGD* and all the other tax administration services throughout the country in order to provide appropriate solutions to the problem. Only that can help reduce corruption and fraud in the tax administration system and strengthen its performance, as is the case of Kenya. For Côte d'Ivoire to achieve this aim, it is necessary to strengthen financial inclusion. That is why the call-forcandidatures practice for the post of Managing Director of Tax Administration should be institutionalized and extended to the *DGD*. Finally, the government should increase civic tax awareness, as it did in 2015.

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Appendixes

Appendix 1: Central directorates of the tax administration structure in Côte d'Ivoire

General Directorate of Taxes (DGI)	General Directorate of Customs (DGD)
Central directorates interviewed as part of the pre	esent study
Tax-base assessment operations Tax collection Tax investigations and audits Human resources and training General resources Communications and quality assurance Legislation, litigation and documentation Planning, research and statistics	Main revenue Statistics and economic research General resources Communications and quality assurance Customs investigations Human resources Training and documentation

Sources: DGI and DGD (2017).

Appendix 2: Models of semi-autonomous tax authorities in Africa

Country	When the authority was set up	Country	When the authority was set up
Uganda	1991	Sierra Leone	2002
Zambia	1993	Lesotho	2003
Kenya	1995	Botswana	2004
Malawi	1995	Gambia	2005
Tanzania	1996	Mauritius	2005
South Africa	1997	Mozambique	2006
Rwanda	1998	Ghana	2010
Zimbabwe	2001	Burundi	2010
Ethiopia	2002	Togo	2014

Source: ATAF (2012, 2016).

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Appendix 3: Tasks assigned to the tax administration general directorates in Côte d'Ivoire

laws and regulations. - Prepare, negotiate and implement international tax treaties. - Carry out tax-base assessment, liquidation and control operations on behalf of the government and local authorities. - Collect fiscal and para-fiscal revenue other than customs duties. - Manage tax litigation. - Design, set up and manage the land registry for urban and rural areas. - Ensure the conservation of land ownership and mortgages. - Ensure the financial management of the government estate and unclaimed property. - Carry out registration and stamping operations.	 Develop draft laws and regulations and implement these regulations in customs-related matters. Ensure the preparation and monitoring of bilateral and multilateral customs agreements. Determine the tax base, the issue, liquidation and collection of customs duties and taxes. Manage the litigation related to the tax base and tax collection and handle matters related to customs infringements. Ensure the country's economic protection. Ensure the development and management of foreign trade statistics. Ensure the development and implementation of legislative and regulatory measures, especially the tax schedules relating to customs matters. Operate and manage the Automated Goods Clearance System (Système de dédouanement automatisé des marchandises, SYDAM).

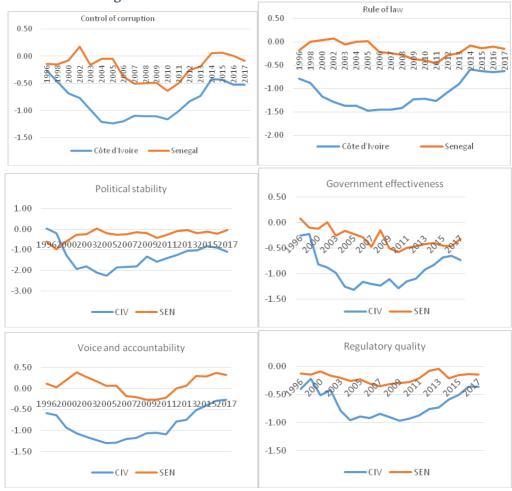
Source: Extracted from Decree No. 2016-869 of 3 November 2016.

Appendix 4: Results of the tax administration assessment based on the PEFA approach

	2008	2012
PI-13 Transparency of taxpayer liabilities and obligations	C+	Α
(i) Clear and exhaustive nature of tax and customs obligations.	С	В
(ii) Access by taxpayers to information relating to tax and customs obligations and to the related administrative procedures.	А	А
(iii) Existence and functioning of a mechanism of appeals against decisions of the tax and customs administration structures.	D	В
PI-14 Effectiveness of measures for taxpayer registration and assessment of tax, levies and customs duties		B+
(i) Control of the taxpayer registration system.	С	В
(ii) Effectiveness of the penalties provided for in the event of non-compliance with registration and tax-return obligations.	В	В
(iii) Planning and monitoring of tax audit programmes.	С	С
PI-15 Effectiveness of collection of taxes and customs duties	D+	D+
(i) Gross tax arrears collection rate (in % of arrears during a financial year).	D	D
(ii) Effectiveness of the transfer to the treasury account of the tax amounts recovered by the tax and customs administration structures.	А	А
(iv) Frequency of complete reconciliation of valuation accounts, tax collections, arrears files and amounts received by the treasury.	А	А

Source: Compiled by the author based on the 2013 EU PEMFAR and World Bank data.

Appendix 5: Comparative trends in the governance indicators between Côte d'Ivoire and Senegal



Source: Compiled by the author based on the World Bank's Worldwide Governance Indicators.

Notes

- 1 The poverty rate rose from 10% in 1985 to 38.4% in 2002 and to 46.3% in 2015.
- 2 It rose from 21.4% of GDP in 2011 to 23.1% in 2012, and then to 23.56% in 2015.
- 3 There were protests against an increase in electricity prices in 2016, demonstrations for a pay increase in 2017, and protests against new tax measures in 2018.
- 4 FMI [IMF] (2011), "Resource mobilization in developing countries".
- 5 Burkina-Faso, Mali, Niger, Senegal, and Benin.
- 6 The World Bank, the IMF, Transparency International.
- 7 The SAP spells are: 1981-1983, 1984-1986, 1987-1989, and 1990-1992.
- 8 Public investment fell by 15% per year, on average, between 1983 and 1989, but it increased again in 1988 (by 16.7%) and 1989 (by 30.7%).
- 9 Due to an embargo imposed by the European Union on two Ivorian ports.
- 10 Removal of several exemptions (export subsidies, etc.), reinstatement of the profit tax following the privatization of a number of big state corporations.
- 11 Generalized reduction of customs duties, reduction of the number of VAT items, and the reduction of the VAT rate from 25% to 20%.
- 12 These services are different from those in charge of other forms of tax, called "various taxes".
- 13 19.47% of the *DGI* officials are senior executives, 18.87 % are higher middle executives, almost 32% are middle executives, and 27.45% constitute the rest.
- 14 The number of employees at the DGD more than trebled between 2013 and 2015.
- 15 Its rate is 0.01% on the turnover of businesses that are subject to a real taxation system.
- 16 That was in 2002-2004, 2006, 2010, and 2014-2016 for the *DGI*; and in 2005, 2008-2010, 2013-2014, and 2016 for the *DGD*.
- 17 The combined single tax is a flat-rate tax paid by small individual businesses. It combines the profit tax, VAT, and the business licence tax.
- 18 All the scores for this indicator are below 0, as shown in Box A.
- 19 With 0 meaning strong corruption and 100 absence of corruption.
- 20 It can even happen that the tradesman pays ten times higher the initial cost of the item.
- 21 With the introduction of the iTax system in September 2013 and the KRA M-Service in October 2014, the latter being a mobile phone application enabling the payment of taxes and taxpayers' access to tax information.



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