

# Youth unemployment and political instability in Côte d'Ivoire

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# Youth unemployment and political instability in Côte d'Ivoire

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# Contents

List of tables

List of figures

Abstract

1.	Introduction	1
2.	Literature review	4
3.	Analysis of political crises in Côte d'Ivoire	7
4.	Methodology	10
5.	Analysis of results	15
6.	Conclusion and recommendations	23
	References	25
	Annexes	28
	Notes	32

## List of tables

1	Regime change and ministerial reshuffles in Côte d'Ivoire since 1999	7
2	Youth unemployment growth by region from 2002 to 2012	17
3	Estimation results from the fixed-effects model	21
4	Result from instrumental variable method estimates, IV fixed effects	22
A1	Regional distribution of youth unemployment and non-employment rates in Côte d'Ivoire from 2002 to 2012	29
A2	Trends in youth non-employment by region from 2002 to 2012	31

## List of figures

1	Evolution of violent political activities in Côte d'Ivoire:	2
2	Endogenous correlation between youth unemployment and political instability	5
3	Evolution of political instability in different regions of Côte d'Ivoire	18
4	Youth unemployment and political instability in the regions of Côtéd'Ivoire	19
A1	Political instability and non-employment of youth in the regions of Côte d'Ivoire in 2002	28
A2	Political instability and non-employment of youth in the regions of Côte d'Ivoire in 2008	28
A3	Political instability and non-employment of youth in the regions of Côte d'Ivoire in 2012	29

# Abstract

The objective of this study was to analyse the nexus between youth unemployment and political instability in Côte d'Ivoire. To achieve this objective, we used a regional approach to investigate the relationship between political instability and youth unemployment in Côte d'Ivoire and we developed a method for calculating the political instability indicator. Analytical, descriptive and econometric methods were used to analyse data from surveys conducted in relation to household living standards levels and surveys on employment. The results indicate that, by considering only persons aged from 15 to 24 years as young people, one might underestimate youth unemployment and the impact of policies aimed at combating youth unemployment. The statistics also revealed a very high level of youth unemployment. The econometric estimation results equally showed a positive and significant relationship between youth unemployment and political instability.

Keywords: Youth unemployment, political instability

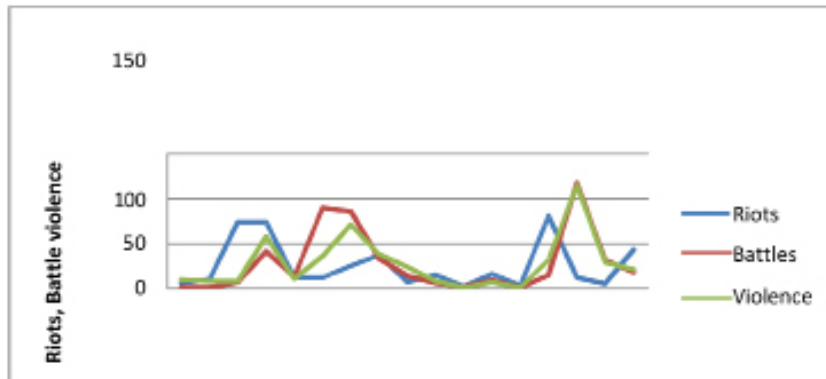
JEL Classifications: E24, F52, C23

# 1. Introduction

Youth unemployment and political instability are two major challenges facing African countries. Globally, 12.6% of young people were unemployed in 2012. In sub-Saharan Africa, the rate of unemployment was at 11.9%. According to 2012 and 2013 employment survey results, the Government of Côte d'Ivoire argued that if we take into account persons paid below the minimum wage and under-employment, the unemployment rate in Côte d'Ivoire was at 26.5% in 2012 (République de Côte d'Ivoire, 2015). This unemployment rate rose to 25% in 2013. These rates may underestimate the extent of youth unemployment. Every year, thousands of young graduates leave Ivorian universities and colleges without being able to find an internship or their first job. Some of these young people sit on roadsides engaged in small businesses in search of the bare minimum to survive. According to Kouakou (2011), 80% of the unemployed people in Côte d'Ivoire are aged between 25 and 34 years old with 29% of them being inactive. This high youth unemployment rate and growing poverty among the population puts the country at high risk of political and social upheavals.

Since their independence, each country in the Economic Community of West African States (ECOWAS) has at one time or another experienced a coups d'état or armed conflict. There have been at least 58 coups and attempted coups in these countries (World Bank, 2011). Since independence in 1960, until the advent of democracy in 1990, Côte d'Ivoire was cited as an example of a stable country at a time when there were repeated coups d'état in some neighbouring countries. However, from 1990 onwards the country experienced political turmoil which led to the first coup d'état in 1999. After this coup d'état, the country went through 10 years of crisis. Figure 1 shows the evolution of riots, armed battles between the government and the rebels, and violence against the civilian population in Côte d'Ivoire from 1997 to 2013. Violent political activity in Côte d'Ivoire had three peaks over the period (Figure 1). The first peak was around 1999 and 2000. This period coincided with the first coup d'état in December 1999 and the attempted coups d'état in 2000. The second peak occurred around 2002 and 2003. This second peak was a result of the failed coup d'état of September 2002 and subsequent onset of political and military crisis. From 2005 to 2009 there was a significant decrease in violent activities due to the signing of peace agreements and the formation of a government of national unity. The third peak was between 2010 and 2011, resulting from the violent political unrest that followed the presidential elections.



**Figure 1: Evolution of violent political activities in Côte d'Ivoire:**

Source: Author's calculation based on the Armed Conflict Location and Event Data (ACLED) data

During crises, young people are either victims or actors. A significant proportion of young people who are active in these crises are often unemployed. This leads us to question whether unemployed young people are at the heart of the crises or whether they are victims of various crises. The problem of unemployment has become a threat to social, economic and political stability for many developing countries (Urdal, 2012; Nwoku, 2012). Indeed, unemployed youth could be manipulated to disrupt the stability of democracy at any time (Nwoku, 2012). Moreover, the high unemployment rate of young people exposes them to abuse by politicians who use them for anti-social and clandestine political activities. According to the International Labour Organization (ILO), a young person is defined as a person between the ages of 15 and 24, whereas the African Youth Charter defines youth as anyone between the ages of 25 and 35. This definition of the African charter takes into account African realities.

Taylor and Hudson (1972) and Gupta (1990) identified three forms of political instability. There is elite or executive instability (coups d'état, changes and crises in government), mass instability (social movements: strikes, demonstrations or riots) and armed or violent instability (civil wars, guerrilla war and violent political actions). Fosu (1992) defined political instability as the change of political power through violence and also any changes that do not respect the legal forms. Alesina *et al.* (1996) they defined political instability as the propensity for a collapse of government by constitutional or unconstitutional means. Political instability is a complex and multidimensional concept. It may not have the same meaning in all countries. As Côte d'Ivoire emerges from 10 years of crises and given the major role played by young people during these crises, it is important to investigate whether youth unemployment is a factor contributing to political instability in the country. The objective of this study was to analyse the correlation between youth unemployment and political instability in Côte d'Ivoire. To achieve this objective, we try to answer the following question in the course of this study: What is the relationship between youth unemployment and political instability in Côte d'Ivoire?

The purpose of this study is to situate youth unemployment at the heart of the analysis with regard to political stability in Côte d'Ivoire. Analysis of potential factors influencing stability is essential for the maintenance of peace and prosperity in a country that has just gone through a protracted period of crisis. One of the interesting contributions of this study is the adoption of a regional approach to conduct the analysis concerning the nexus between political instability and youth unemployment in Côte d'Ivoire. Indeed, the relationship between these two variables may vary from one region to another since most studies address the relationship between these two variables from a national perspective.

The rest of the paper is organized as follows: in Section 2 we present the literature review, in section 3 we analyse political crisis in Côte d'Ivoire. In Section 4 we present the methodology. This section is followed by the presentation and analysis of the results and finally the conclusion.

## 2. Literature review

Several studies have been carried out to analyse the relationship between unemployment and political instability. Political instability is considered as one of the causes of youth unemployment by some authors. According to Colino (2012), political instability arising from high uncertainty reduces the demand for labour and leads to higher unemployment. Ratsimbaharison (2011) has shown that youth unemployment is one of the factors contributing to the emergence of civil war in many countries. If the labour market cannot absorb a sudden increase in the number of young jobseekers, levels of frustration increase. This frustration can draw unemployed young people into subversive activities. In a similar vein, Collier (2000) argues that large cohorts of young people can be a factor in reducing employment costs through the provision of adequate labour force for rebels with low opportunity cost.

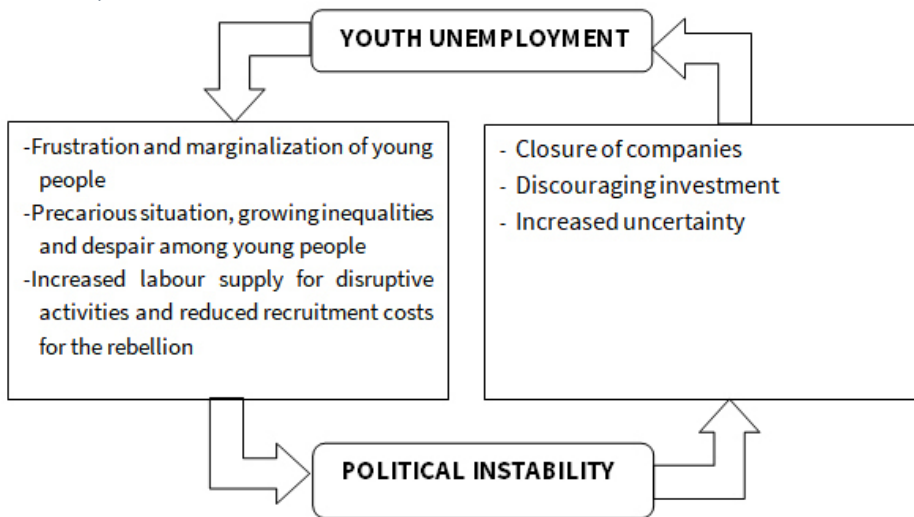
This increases the risk of armed conflict (Collier, 2000). If young people have no alternatives to unemployment and poverty, they are more likely to join rebels, which appears to be another way of earning an income (Urdal, 2006). According to this view, rebellion is only possible when the potential gain is so high and the expected costs so low such that the rebel recruits will prefer to join the rebellion rather than engage in alternative income generating opportunities. Azeng and Yogo (2013) arrive at the same conclusion. They used a fixed-effect regression with instrumental variables on a sample covering 24 developing countries over the period 1980–2010. They found that youth unemployment is significantly associated with an increased risk of political instability. Uddin and Uddin (2013) used the descriptive approach of previous research to collect empirical evidence. Youth unemployment has six major effects that have created tensions and hatred between the haves and have-nots, leading to inter-community clashes and the emergence of groups such as Boko Haram, Niger Delta militants, armed robbery, prostitution and child trafficking.

Using a qualitative research method, Mago (2014) argues that urban youth unemployment has become a “time bomb” for Africa because of its social, political and economic implications. He recommends regional integration strategies to address the challenge of youth unemployment. Young people are a dynamic segment of the population in all countries. They are politically active. This conclusion is similar to those of Hall (1997), Naitras (2002), Adesina (2013) and Obumneke (2012). For Nwokwu (2012) the unemployed youth have become political thugs and bloodthirsty thugs at the disposal of Nigerian politicians. Adebayo (2013) shares this position as he argues that criminal activities such as armed robbery, kidnapping, political brutality and other social vices perpetrated by unemployed youths have greatly contributed to Nigeria’s

developmental lag. To arrive at this conclusion, the author used a theoretical analysis supported by a descriptive analysis.

Transmission channels on the impact of political instability on youth unemployment are as follows. First, political instability leads to job losses through business closures. Second, political instability discourages investment. If there is no investment, there is no creation of new jobs with the resulting increase in the number of unemployed. Third, political instability increases uncertainty. It reduces the demand for labour (see Figure 2). Since young people have less security in companies due to low seniority, they are the first to be made redundant when companies face difficulties. Youth unemployment can influence political instability through different channels. Youth unemployment can create frustration and marginalization of young people (Miguel, 2007). It can lead to protest movements and hence political instability (Urdal, 2006). Lack of employment can push young people into a situation of precariousness and despair. This situation increases inequalities. Inequality and precariousness are both fertile ground for political instability. Another channel through which youth unemployment affects political instability is the formation of insurgent groups. Indeed, a high number of unemployed youth increases the supply of labour for disruptive activities and reduces the recruitment costs for the rebels. Thus, youth unemployment facilitates the formation of rebel groups (Collier, 2000).

Figure 2: Endogenous correlation between youth unemployment and political instability



Source: From the author.

Several methods have been used in the literature to measure political instability. Alesina and Perotti (1996) developed a measurement for the average socio-political

instability (SPI) by country from 1960 to 1982. Relying on principal component analysis, they derived their indicators from data pertaining to the number of politically motivated assassinations in a country, the number of people killed in mass violence (expressed as a percentage of the country's total population) and the number of successful coups and attempted coups. Barro (1991) used the number of revolutions and coups d'état per year to formulate a political instability indicator. Gupta (1990), Ozler and Tabellini (1991), Benhabib and Spiegel (1992) and Fosu (2002) used similar indicators in their studies on the effect of political instability in economic growth, savings or investment. As for Ades and Chua (1997), they developed a regional instability indicator using the average number of revolutions and coups d'état per year in the countries neighbouring a country. Jong-a-Pin (2009) and Aisen and Veiga (2011) also used changes in the Office of the Prime Minister as the main proxy for political instability. Some authors have used the country classification method to measure political instability. This is the case with Campos and Nugent (2000) who developed two indicators to measure political instability. One indicator to measure mild forms of political instability and another to measure severe forms of instability. Goldsmith (1987) used a similar methodology, but incorporated stability shifts between two periods. He classified his sample into four groups of countries: ever-stable (countries that were stable in both periods), chronically unstable (countries that were unstable in both periods), stabilizing (countries that became more stable in the following period of time compared to the previous period), and destabilizing (countries that became less stable in the following period of time compared to the previous period). Fedderke *et al.* (2001) developed an indicator for political instability based on nine components. This index resembles more of a political rights violation indicator rather than a political instability indicator, although political rights violations can lead to political instability. Other authors have used indicators produced by international institutes and rating agencies. These authors include Zureiqat (2005) who applied the Polity 2 indicator "democratization of a country" to measure political instability in a country. Azeng and Yogo (2013) considered the risk of internal conflict in the PRS Group as a measure of political instability. In our study, we used this internal conflict indicator because it is available for many countries.

### 3. Analysis of political crises in Côte d'Ivoire

From independence in 1960 to the advent of democracy in 1990, Côte d'Ivoire was cited as an example of a stable country. The first president, Félix Houphouët-Boigny, managed to maintain political stability in the country until his death in 1993 despite tensions between natives and non-natives in the western regions of the country due to land scarcity (Beauchemin, 1999). However, after his death, his successor Henry Konan Bédié introduced the identity dimension into politics in an effort to push aside some of his rivals such as Alassane Ouattara from the northern part of the country. People from the north of the country felt marginalized, resulting in rising tension in the country. These tensions led to political unrest that culminated in the first coup d'état in 1999. Subsequently, Côte d'Ivoire went through more than 10 years of military and political crises which ended in 2011 with post-election violence which caused almost 3,000 deaths. Table 1 shows the changes of regime and ministerial reshuffles from 1999 onwards. Changes of regime or ministerial reshuffles have not always been in line with Côte d'Ivoire's usual political cycle.

Table 1: Regime change and ministerial reshuffles in Côte d'Ivoire since 1999

Dates	Cabinet reshuffle and regime change	Major events leading to instability	Actors in conflict
24 December 1999	Coup d'état by General Guéi Robert	A rebellion of soldiers turns into a coup; rebels led by General Guéi Robert overthrew the regime of President Henry Konan Bédié	The rebels led by General Guéi Robert and the President Henry Konan Bédié's regime (PDCI-RDA) <sup>1</sup>
22 October 2000	Election of Laurent Gbagbo as President of the Republic	Interior ministry announces victory for General Gueï Robert; Laurent Gbagbo declares himself "Head of State" and calls on his followers to take to the streets	Laurent Gbagbo's party (FPI) <sup>2</sup> and General Guéi Robert's camp
5 August 2002	Formation of a government of national unity with all the major political parties in the country	Establishment of a "forum for national reconciliation", aimed at putting to an end the tensions	All major political parties in the country

19 September 2002	Attempted coup that transformed itself into a rebellion	Soldiers exiled in neighbouring countries launch attacks on various military camps and try to overthrow the regime in power; they fail and take control of Bouaké (central north) and Korhogo (north)	President Laurent Gbagbo's regime and the insurgency (MPCI) <sup>3</sup>
26 January 2003	Appointment of Seydou Diarra as Prime Minister by consensus	Signing of the Marcoussis Agreement and violent protests in Abidjan	All major political parties in the country and the rebellion (Forces Nouvelles)
4 December 2005	Appointment of Charles Konan Banny as Prime Minister by consensus and formation of a transition government	Signing of the Pretoria Agreement	All major political parties in the country and the rebellion (Forces Nouvelles)
16 September 2006	Second government of Charles Konan Banny	Toxic waste disposal	President Gbagbo and Prime Minister Charles Konan Banny
4 April 2007	Appointment of Soro Guillaume, the leader of the rebellion, as Prime Minister	Signing of the Ouagadougou Agreement	President Laurent Gbagbo's camp and the rebellion (Forces Nouvelles)
28 November 2010	Second round of the presidential elections: Alassane Ouattara and Laurent Gbagbo both declared as winners	Post-electoral crisis leading to the arrest of Laurent Gbagbo and the subsequent assumption of power by Alassane Ouattara	The pro-Gbagbo and pro-Ouattara

Source: From the author.

The failed coup in 2002, which turned into a rebellion, caused the country to split into two. The presidential camp stationed in Abidjan controlled 40% of the national territory and the rebellion operating from Bouaké controlled the remaining 60%. Young people played an important role in this crisis. The presidential camp was supported by the “young patriots” who, through peaceful and violent actions, helped to keep the regime in power until 2011. The rebellion also used young people to expand its military strength.

Both sides made promises to recruit young people. Faced with offers from both sides, most unemployed youths had three choices: a rebel choice, a choice for legality and a choice for neutrality. Youths who preferred rebellion joined the rebellion camp and youths who opted for legality joined the presidential camp. Some youths who preferred neutrality were coerced through threats to their families or to themselves to join one of the two camps. They were also forced to join one of the two camps because

neutrals were considered by both camps as spies for the other camp. This pressure led some young people to join either side. As a reward, the presidential camp recruited 3,000 young people from its camp called “young recruits” into the regular army and offered incentives to its soldiers. By recruiting these young people, the presidential camp gave employment to these mostly unemployed youths. During the signing of an agreement between the two parties, 5,000 rebel soldiers were allowed to join the regular army. The rebel leaders had promised sums of money to the young recruits in their ranks and their integration into the regular army.



## 4. Methodology

In this study, we used both descriptive and econometric analysis to conduct the empirical analysis. Data from national surveys and international institutions were used extensively to support this analysis.

### 4.1. Empirical analysis

The empirical analysis was done in two stages. In the first stage we performed a statistical analysis and in the second stage we provided an econometric estimation.

#### 4.1.1. Descriptive analysis

Following Hoeffler's (2008) analysis method, in this section we adopt an analytical and descriptive approach. Through graphs and calculation of ratios, we analyse the relationship between youth unemployment and political instability in Côte d'Ivoire. We also use this method to show the particularity of each region in Côte d'Ivoire.

#### 4.1.2. Econometric analysis

An econometric model can be used to analyse the relationship between political instability and youth unemployment in Côte d'Ivoire. Building on the works of Mbaku and Paul (1989) and Aisen and Veiga (2006), we applied a panel model to analyse the relationship between the two components in the country. We have identified 11 regions of the country to constitute the individuals in the panel (the Central Region, the Central-Eastern Region, the Central-Northern Region, the Central-Western Region, the Northern Region, the North-Eastern Region, the North-Western Region, the Western Region, the Southern Region, the South-Western Region and the City of Abidjan). These 11 regions form the 11 strata selected for surveys on the standard of living of households (ENV) in Côte d'Ivoire (INS, 2015). The panel model estimated is:

$$Y\_UN_{it} = a_0 + INST_{it} + EDU_{it} + PAUV_{it} + v_i + e_{it}$$

Where:

$Y\_UN_{it}$  represents youth unemployment in region  $i$  at date  $t$ ;

$INST_{it}$  represents the political instability linked to the events that took place in region  $i$  on date  $t$ ;

$EDU_{it}$  is the level of education of the unemployed in region  $i$  at date  $t$ . We use four levels of education (out-of-school =  $EDU0$ , primary =  $EDU1$ , secondary =  $EDU2$  and higher =  $EDU3$ );

$PAUV_{it}$  is the poverty rate in region  $i$  at date  $t$ ;

$v_i$  represents the specific impacts for each region;

$e_{it}$  is the error term.

### 4.1.3. Data collection and processing

To the best of our knowledge, no other study has examined the analysis of the relationship between youth unemployment and political instability in Côte d'Ivoire. Only the 2002 and 2008 surveys on household living standards (ENV) INS (2002, 2008), the 2012 employment survey conducted by the Agence d'Etude et de Promotion de l'Emploi (AGEPE, 2012) and the 2013 survey on the employment situation and child labour (ENSETE 2013) (INS, 2013) provide details on the unemployment situation in the country. Indeed, the ENVs are not designed to study unemployment in Côte d'Ivoire. However, due to lack of data on unemployment in the country, we used the ENVs to analyse issues related to unemployment. The ENVs focus on duration of unemployment, job search techniques and the availability of the unemployed to engage in work. This relevant information can be used to analyse unemployment in Côte d'Ivoire. Surveys on household living standards are sample surveys conducted by the government to obtain information on the living conditions of households. These surveys are carried out by adopting the geographical reference baseline of the 11 development hubs. Two-stage stratified random sampling was used for these surveys. These surveys contain an individual questionnaire on unemployment which provides information on the unemployed. The 2002 and 2008 ENVs covered respectively 10,800 and 12,600 households organized in 540 and 630 clusters and randomly selected from the General Population and Housing Census INS (1998). Within each cluster, 20 households were selected for administering the questionnaire. The 2012 AGEPE employment survey covered 1,600 households organized in 575 clusters. The 2013 ENSETE covered 12,000 households divided into 600 clusters. Households are also randomly selected in the general population and housing census for the year. Data on the educational levels of the unemployed, incidence and depth of poverty are taken from the 2002 and 2008 ENV and the AGEPE employment survey as well as from the UNDP report (2013). Annual data on violent political activities are available from 1997 to 2014 for ACLED data.

Before the econometric estimation, data on youth unemployment, youth non-employment, poverty and educational attainment were estimated quarterly using the interpolation method of Goldstein and Khan (1976). This quarterly data replication

allows for more observations and a better understanding of the effects of shocks. The data on political instability being real-time data are calculated without using the Goldstein and Khan (1976) method.

#### 4.1.4. Definition and measurement of variables

##### - Unemployment and lack of employment for the youth

Controversies exist around the definition of youth and data on youth unemployment. With regard to the definition of youth, the ILO definition differs from that of the African Youth Charter. To factor in the particularities of African countries and to facilitate comparison of our study findings with the results of other similar studies, we decided to use both definitions of youth. According to the ILO, the term “youth” refers to persons aged 15 to 24 years and “adult” includes persons aged 25 years and above. According to the African Youth Charter, the term “youth” refers to persons between 25 and 35 years of age. We will calculate data based on this African Youth Charter definition of youth from household living standards survey data. This will enable us to determine whether the relationship between youth unemployment and political instability is responsive to the selected definition of youth.

To deal with the controversy over the underestimation of youth unemployment in Africa, we decided to also use the youth non-employment indicator. This will allow us to compare the results obtained with this indicator with those obtained in the case of youth unemployment. Non-employment takes into account unemployed and inactive youth. Youth unemployment can be calculated as follows:

Youth unemployment indicator = (total youth population - employed youth population) / Total youth population

or

Youth unemployment indicator = (unemployed youth population + inactive youth population) / Total youth population

##### - Measurement of political instability

The choice for a regional approach in the analysis requires data on political instability at the regional level. One of the added values of this study was the development of a method for calculating the political instability indicator. The measure of political instability used in this study is based on the definitions of political instability provided by Taylor and Hudson (1972), Gupta (1990) and Alesina *et al.* (1996). Drawing on Barro's (1991) calculation of the political instability indicator and the methodology for constructing the ICRG indicators, a political instability indicator

was developed using ACLED data. The ACLED database is crucial because it provides information on violent activities in different countries since 1997.

Based on the assumption that the objective of the anti-government protests is to overthrow the ruling regime, we include situations of political and military unrest threatening the exercise of power by the ruling regime in our measure regarding political instability. For example, an analysis of the recent history of Côte d'Ivoire shows that from 2002 to 2011, although there was no change of regime at the helm of leadership, situations of political unrest prevented the full exercise of power by the ruling regime and the smooth functioning of the State. We were in a situation of political instability without having the government overthrown.

- ACLED data: The ACLED database provides real-time data for all African countries from 1997 to date. It contains information on the location, exact date, actors and other characteristics of violent political activities in developing countries. ACLED data are used in this study to develop an instability index for each of the 11 regions of Côte d'Ivoire. Since different political upheavals do not have the same capacity to bring about regime change, we assign weights to these different political upheavals using the ICRG data calculation method. The different situations of political instability are rated as follows:

- Score 1 for riots without government reshuffling.
- Score 2 for riots followed by government reshuffling.
- Score 3 for riots leading to the fall of the regime and coups.

These scores are converted into weights and applied to different situations of political instability. Thus, we identified in the ACLED database all the riots and armed attacks against the government and assigned them the following weights:

$$\text{Weightings} = \begin{cases} \frac{1}{6} & \text{for riots without government reshuffling} \\ \frac{2}{6} & \text{for riots following government reshuffling} \\ \frac{3}{6} & \text{for riots leading to the fall all of regime and coups} \end{cases}$$

Thus, a weight of 50% was given to riots leading to the fall of the regime and coups, a weight of 33.33% to riots followed by government reshuffle and a weight of 16.67% to riots without government reshuffle. To calculate the instability index, the different events are added together after applying the corresponding weight to them:

- Level of education: Educ0 = the number of unemployed young people not attending school; Educ1 = the level of primary school enrolment in the region;

Educ2 = the level of secondary school enrolment in the region; Educ3 = the level of higher education enrolment in the region. The data on the level of education comes from the 2002 and 2008 ENVs (INS, 2002 and 2008) and the 2012 and 2013 employment surveys ((AGEPE (2012) ; INS (2013)).

- Poverty: Data on poverty are from the 2002 and 2008 (INS, 2002 and 2008) and UNDP (2013).

## 5. Analysis of results

### 5.1. Results from the statistical analysis

#### 5.1.1. Analysis of youth unemployment and non-employment in Côte d'Ivoire

In this section, we analyse the 11 strata defined by ENVs. These 11 strata represent the 11 development nodes of the country. The choice of conducting the analysis at the level of these 11 regions is primarily guided by data availability. Then, by conducting the analysis at the level of these regions, the particulars of the regions in the study are taken into account. Finally, this approach makes it possible to consider the regional location of political parties in the analysis. Table A1 in the annexes contains the unemployment and non-employment rates of young people in the different regions of Côte d'Ivoire. In 2002, the city of Abidjan, the central-northern and western regions recorded the highest youth unemployment rates for both young people aged 15 to 24 and those aged 25 to 35 years. Unemployment and non-employment rates for youth aged 15 to 24 were higher than those for youth aged 25 to 35 years in all regions. This trend was reversed in 2008 in terms of youth unemployment but continued in terms of youth non-employment except in the south, central-west and north-west regions. In 2012, except for Abidjan city, the south, the central-north and north-east regions, the unemployment and non-employment rates of young people aged 15 to 24 were higher than the unemployment and non-employment rates of young people aged 25 to 35 years. Unemployment rates are relatively low in different regions of Côte d'Ivoire. Over the 3 years (2002, 2008 and 2012), the City of Abidjan had the highest unemployment rates for both youth aged 15–24 and 25–35 years. This can be explained by the fact that Abidjan is the economic capital and the country's leading industrial zone. There is therefore a migration of unemployed youth from other parts of the country to Abidjan in search of employment in the modern sector. The non-employment rates of young people are very high. In many regions, these rates are above 50% at a time when youth unemployment rates are below 10% in most regions of Côte d'Ivoire. Limiting ourselves only to the ILO definition of unemployment leaves aside a significant proportion of young people who do not have access to employment. The large gap between the youth unemployment rate and the youth non-employment rate can lead to policy failures in the fight against youth unemployment. Since the 1990s, several programmes to combat youth unemployment have been put in place, but youth unemployment is

still a concern. Indeed, the overlapping of several institutions dealing with the issue of youth unemployment has led to the inefficiency of these institutions. To remedy this shortcoming, in 2015 the Ivorian Government created an agency for the integration and employment of young people called the “Youth Employment Agency”. This agency is a “one-stop shop” that consolidates all initiatives from several ministries. This new agency must take into account the non-employment of young people in order to be able to achieve the objectives that have been earmarked for it. Failure to address the high rate of youth non-employment in the development of labour market policies creates potential ground for political instability. These young people being excluded from government programmes could turn to criminal and other disruptive activities.

### ***5.1.2. Trends in youth unemployment in the regions of Côte d’Ivoire***

Table 2 illustrates that from 2002 to 2008 there has been an increase in youth unemployment in all regions of Côte d’Ivoire, both among young people aged 15 to 24 and those aged 25 to 35 years. The largest increases were observed in the South, North and Central-East regions for young people aged between 15 and 24 years and the City of Abidjan, the South, Central and South-West regions for young people aged between 25 and 35 years. This can be explained by the political and military crisis that began on 19 September 2002. Moreover, apart from the Central Region, the regions with the highest rates of growth in unemployment among young people aged between 25 and 35 years are strongholds of the regime in power. This can be explained by the migration of the population from the rebel-occupied areas to the southern regions under the control of the ruling regime. The crisis has led to the closure of some businesses and increased military spending at the expense of profitable investments.

From 2008 to 2012 youth unemployment among youth aged 15 to 24 years old declined in some regions and increased in others. For youth unemployment among those aged 25 to 35 years, there was a decrease in all regions of Côte d’Ivoire. The largest declines were observed in the North Region for unemployment among youth aged 15–24 and in the Central, North-Eastern and Southern regions for unemployment among youth aged 25–35. These declines are attributable to the economic recovery after the post-electoral crisis in 2011. The government had undertaken major investment projects and improved the economic environment. These results indicate that unemployment reduction has been stepped up with regard to unemployment among young people aged over 24 years. Therefore, limiting ourselves to the ILO definition of youth we would be unable to capture the actual state of unemployment in Africa and the efforts made by governments to reduce youth unemployment. In Africa, young people aged 15 to 24 years are still in school. Therefore, policies to combat unemployment are not geared towards this category of young people. Table A2 in annex illustrates the trends in youth non-employment by region from 2002 to 2012.

Table 2: Youth unemployment growth by region from 2002 to 2012

Region	2002–2008		2008–2012	
	15–24 years	25–35 years	15–24 years	25–35 years
Abidjan	3.34	9.18	2.39	-5.53
South	6.11	8.33	-1.15	-6.96
Central-West	3.00	3.00	2.12	-1.74
North	5.07	2.99	-4.10	-4.83
Central-North	1.76	0.17	-2.97	-2.74
Central-East	5.59	4.90	-1.03	-4.18
West	4.07	1.81	1.37	-1.55
Central	2.16	8.21	2.41	-7.00
North-East	2.46	6.65	-2.20	-6.99
South-West	4.31	9.01	3.66	-3.24
North-West	1.10	0.92	1.64	-0.05
Côte d'Ivoire	3.54	5.02	0.19	-4.07

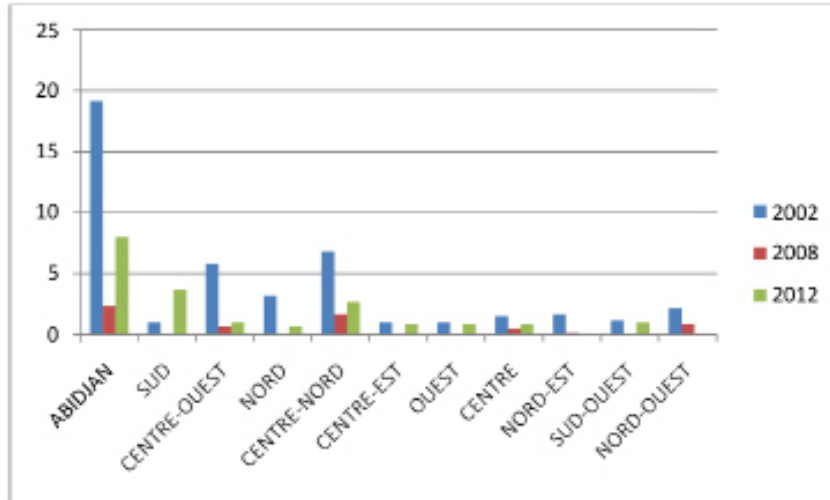
Source: Author's calculation based on the ENV (INS, 2002, 2008 and 2013) and AGEPE (2012) data.

It is worth analysing the relationship between being a member of the ruling party and employment of young people. The questionnaires used to develop the databases used in this study do not provide information on an individuals' membership to political parties. To address this limitation, we conducted our analysis by considering the individuals' region of residence instead of their membership to a political party. Indeed, in Côte d'Ivoire, when a president assumes power, he makes significant investments in his region of origin and offers employment in the public administration and in the army to his party's followers from the areas that serve as strongholds for his political party. These actions influence the level of unemployment in these regions.

### 5.1.3. *Trends in political instability*

Figure 3 shows that the most violent political activity in the country was recorded in 2002. The City of Abidjan and the Central-West, North and Central-North regions contributed significantly to this political instability. This can be explained by the onset of politico-military crisis. In 2008 the country was less unstable due to the signing of various peace agreements and the sharing of power between the regime in power at the time, the opposition parties and the rebel leaders. In 2012, Abidjan, Southern and Central-Northern regions contributed the most to the political instability. The City of Abidjan and the Central-North regions were the principal capitals for the two camps that were battling each other during these 10 years of crisis, but they are also the most important development hubs in the country.



**Figure 3: Evolution of political instability in different regions of Côte d'Ivoire**

Source: Author's calculation based on the ACLED data.

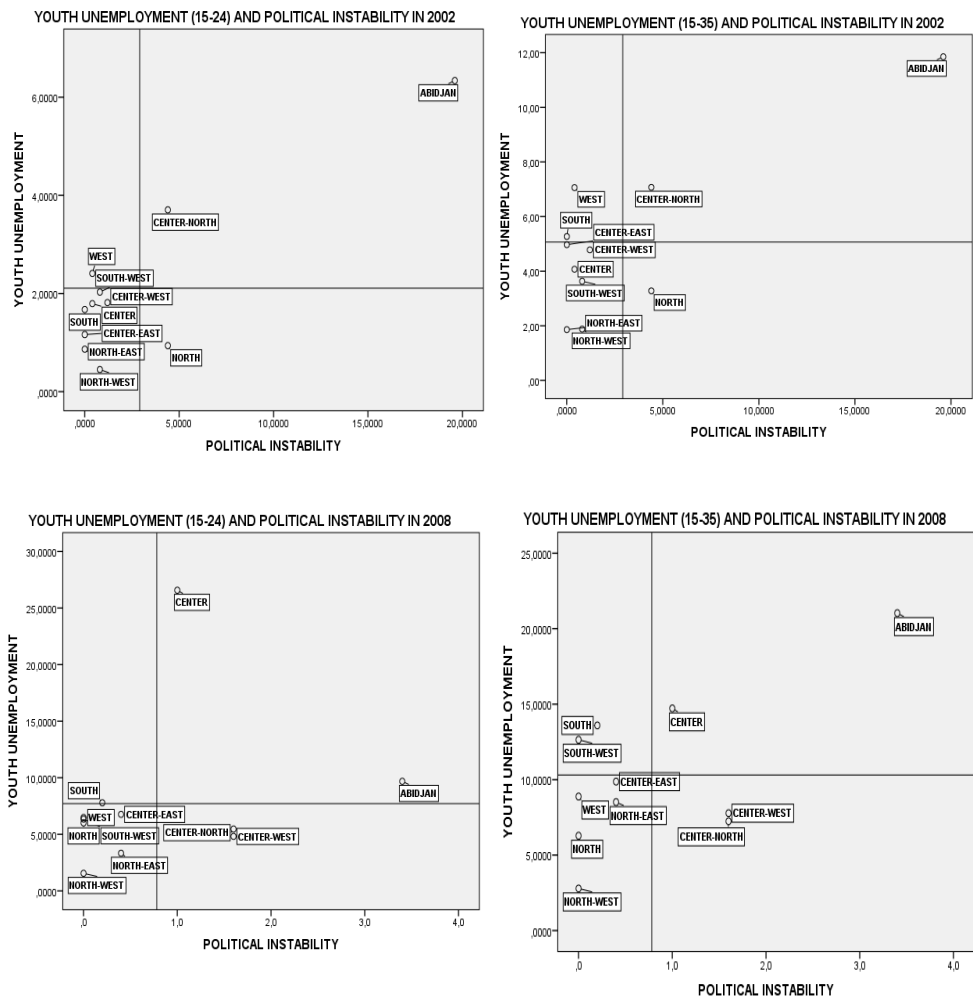
#### 5.1.4. *Analysis of the relationship between instability and youth unemployment in the regions*

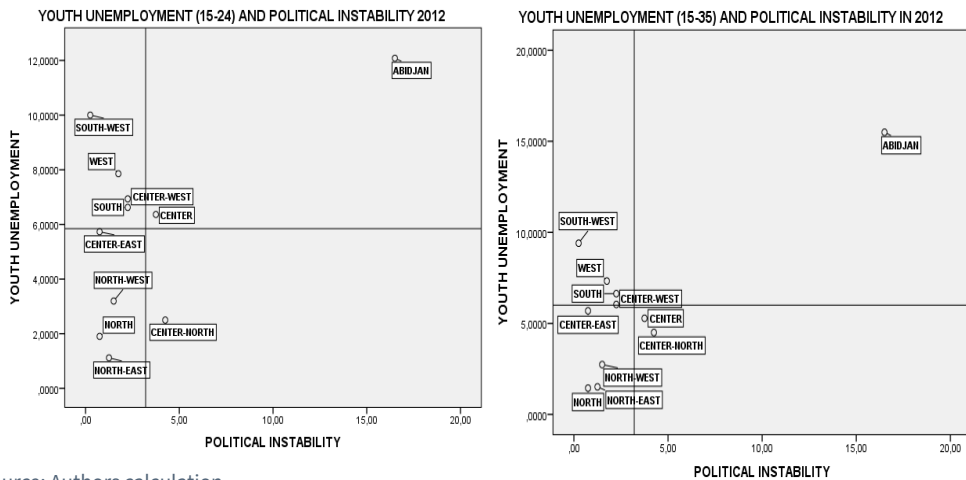
We begin analysing this relationship with graphical evidence of the relationship between youth unemployment and political instability. Figure 4 shows the relationship between youth unemployment and political instability in the different regions of Côte d'Ivoire. In 2002, the City of Abidjan and the Central-North region had the highest youth unemployment and highest levels of political instability (above the country's average). The North Region had a high level of instability but below-average youth unemployment. This is the year the civil war started and the country was divided into two parts. Abidjan was the centre of power for the presidential camp and the North-Central region (Bouaké) was the rebel capital. In 2008, the City of Abidjan and the Central region were the only regions with both high youth unemployment and a level of political instability above the country's average. The Central Region, which had low (below average) levels of youth unemployment and political instability in 2002, had high levels of youth unemployment and political instability (above average). The Central-West and Central-North regions had high levels of instability but lower levels of youth unemployment than the average. In 2012, only the City of Abidjan had high youth unemployment and political instability. The South-West region had high unemployment but low levels of political instability. We find that most regions with high (above average) political instability had high (above average) levels of youth unemployment.

These results are almost identical to those obtained by replacing youth unemployment with youth non-employment (see Figures A1, A2 and A3 in the annex). In 2002, the Central-North and Abidjan regions had the highest levels of youth non-employment (aged 15–24 and 25–35 years) and instability. The North Region has

an above-average level of instability but a low level of youth non-employment. The Central, South and Central-West regions had high levels of youth non-employment but low levels of political instability. In 2008 the Central, North-Central and Abidjan regions had both high levels of youth unemployment and political instability. The Central-West Region had an above-average level of political instability and a near-average level of youth non-employment. The Central East Region had a high level of political instability and a low level of youth non-employment. In 2012 the City of Abidjan and the Central-North Region had both high levels of youth non-employment and political instability. The Central-Western and Southern regions had high levels of youth non-employment but low levels of political instability.

Figure 4: Youth unemployment and political instability in the regions of Côte d'Ivoire





Source: Authors calculation.

## 5.2. Results of Econometric Analysis

The panel stationarity tests are not relevant to this study due to the relatively low time-series sample size. The results from estimating a fixed-effect model with youth unemployment and youth non-employment as dependent variables are summarized in Table 3. The results of estimates (1) and (2) indicate a positive and significant relationship between youth unemployment and political instability for both (15–24) and (25–35) year olds. A high level of political instability is an explanatory factor for the level of youth unemployment in Côte d'Ivoire. This outcome is similar to the findings of Azeng and Yogo (2013). There is a positive relationship between primary (Educ1) and secondary (Educ2) school enrolment rates and youth unemployment rate (25–35) in estimate (2). Côte d'Ivoire's general education system (primary and secondary) does not provide any particular qualifications, which could explain this positive relationship. But there is a negative and significant relationship between youth unemployment and the tertiary enrolment rate in estimates (3) and (4). However, there is a negative and significant relationship between youth unemployment and the non-enrolment rate in estimates (1) and (2).

To test the robustness of the results obtained with the estimation of the relationship between youth unemployment as defined by ILO, we used an alternative measure of youth unemployment that is youth non-employment. These are estimates (3) and (4), which show that there is also a positive and significant relationship between youth non-employment and political instability.

The results of Hausman's test ( $\text{Prob} > \chi^2 = 0.000$ ) indicate that the fixed-effect panel model is appropriate. We used the Breusch Pagan test to investigate the hypothesis of homoscedasticity. The results confirm the hypothesis of homoscedasticity. In addition, the findings from Wooldridge's test indicate that the errors are not auto-correlated. But there could be an endogeneity bias in the results obtained with the fixed effect model estimation. To resolve this bias problem, we used the instrumental variable method.

Table 3: Estimation results from the fixed-effects model

Variables	(1)	(2)	(3)	(4)
	Unemployment (15–24 years)	Unemployment (25–35 years)	Non-employment (15–24 years)	Non-employment (25–35 years)
Instability	0.41** (2.23)	0.38** (2.11)	0.2* (1.93)	0.14* (1.92)
Educ0	-0.006* (-0.19)	-0.05* (-1.91)	-0.01 (-0.39)	-0.005 (-0.65)
Educ1	0.0004 (0.02)	0.12*** (4.48)	0.01 (1.44)	0.02*** (2.72)
Educ2	0.03 (0.80)	0.15*** (5.13)	0.02*** (3.86)	0.04*** (4.01)
Educ3	-0.03 (-0.65)	-0.05 (-1.03)	-0.03** (-2.37)	-0.05** (-2.34)
Pov	0.07* (1.95)	0.01 (0.34)	0.18*** (12.52)	0.16*** (9.83)
Cst	-0,52 (-0,22)	-2,14 (-1,06)	0,9 (1,12)	2,2** (2,39)
N	132	132	132	132
F Test	F(10, 115) = 8,22 Prob> F = 0.0000	F(10, 115) = 6,88 Prob> F = 0.0000	F(10, 115) = 26,22 Prob> F = 0.0000	F(10, 115) = 9,76 Prob> F = 0.0000
Hausman Test	Prob> Chi <sup>2</sup> = 0.000	Prob> Chi <sup>2</sup> = 0.000	Prob> Chi <sup>2</sup> = 0.000	Prob> Chi <sup>2</sup> = 0.000
Breusch Pagan Test	Prob> Chi <sup>2</sup> (10) = 0.00	Prob> Chi <sup>2</sup> (10) = 0.00	Prob> Chi <sup>2</sup> (10) = 0.000	Prob> Chi <sup>2</sup> (10) = 0.09
Auto- correlation Test	Prob> F = 0.372	Prob> F = 0.755	Prob> F = 0.083	Prob> F = 0.093

\*\*\*, \*\* and \* represent test significance levels of 1%, 5% and 10% respectively; figures in parentheses are t-statistics.

Source: Author's calculation.

The use of double least squares to estimate the relationship between youth unemployment and political instability recommends the use of variable instruments. We used the time-lagged political instability variable. The results of the instrumental variable estimation are reported in Table 4. The results for all the four estimates confirm that there is a positive and significant relationship between youth unemployment and political instability for estimates (6) and (8). There is also a positive and significant relationship between youth unemployment (25–35 years) and primary and secondary school enrolment rates in estimates (5), (6) and (7). Estimates (5), (7) and (8) indicate a positive and significant relationship between youth unemployment and poverty levels.

Analysis of the relationship between youth non-employment and political instability shows that there is a positive and significant relationship between youth non-employment and political instability. The results of estimates (7) and (8) indicate a positive relationship between youth non-employment and tertiary education. This

could be explained by the fact that higher education graduates are usually unwilling to accept certain levels of jobs. Thus, they find themselves jobless after several unsuccessful attempts to find a job.

Table 4: Result from instrumental variable method estimates, IV fixed effects

Variables	(5)	(6)	(7)	(8)
	Unemployment (15–24 years)	Unemployment (25–35 years)	Non-employment (15–24 years)	Non-employment (25–35 years)
Instability	0.2 (1.04)	0.29* (1.60)	1.19 (1.39)	0.28* (1.65)
Educ0	0.03 (0.74)	0.06** (2.31)	0.04 (1.45)	0.004 (0.45)
Educ1	0.03 (0.94)	0.13*** (4.87)	0.02 (0.91)	0.03** (2.00)
Educ2	0.07** (2.06)	0.16*** (5.64)	0.03*** (3.60)	0.04*** (4.01)
Educ3	-0.01 (-0.22)	-0.06 (-1.24)	0.03* (1.54)	0.05** (2.23)
Pov	0.03 (0.74)	0.02 (0.58)	0.12*** (4.12)	0.16*** (9.68)
Cst	-1.5 (-0.72)	-2.35 (-1.35)	3.5*** (2.99)	2.15** (2.31)
N	132	132	132	132

\*\*\*, \*\* and \* represent test significance levels of 1%, 5% and 10% respectively; figures in parentheses are t-statistics.

Source: Author's calculation.

## 6. Conclusion and recommendations

Analysing the relationship between youth unemployment and political instability is essential for Côte d'Ivoire, which went through 10 years of politico-military crisis. Young Ivoirians are active in politics. The objective of this study was to analyse the link between youth unemployment and political instability. In the course of this study, we conducted a descriptive and econometric analysis. The distinction between youth aged 15–24 and youth aged 25–35 years revealed that by considering only those aged 15–24 years old as youth, the level of youth unemployment and the impact of policies to combat youth unemployment could be underestimated. The concept of unemployment as defined by the ILO does not make it possible to ascertain the whole situation with regard to unemployment in Africa in general and in Côte d'Ivoire in particular. Statistics have revealed non-employment rates of more than 50% in some regions, while youth unemployment rates according to the ILO definition are less than 5% in these regions.

The choice of the regional approach in this analysis prompted us to develop a method for calculating the political instability indicator. This study found that there is a link between youth unemployment and political instability in Côte d'Ivoire. Almost all regions of Côte d'Ivoire that had a high level of contribution to political instability also had high youth unemployment rates. Results of econometric estimations showed a positive and significant relationship between political instability and youth unemployment for both (15–24) and (25–35) year olds. Similar results were obtained when we used youth non-employment as an alternative measure of youth unemployment. The high level of political instability is an explanatory factor for youth unemployment in Côte d'Ivoire. In addition, there is a positive relationship between youth unemployment and primary and secondary school enrolment rates. However, there is a negative relationship between youth unemployment and non-enrolment and tertiary enrolment rates.

### **Combating political instability to reduce youth unemployment:**

The political instability in Côte d'Ivoire recently led to the closure of businesses and the subsequent loss of jobs. Persistent political crises hamper new investment and job creation for young university graduates. Creating a stable political environment reassures investors, encouraging investment and creating jobs. Regional analysis on the relationship between youth unemployment and political instability has shown

that Abidjan and the Central-North regions have been identified as areas where there have been more violent political activities and high levels of youth unemployment. Addressing regional disparities and marginalization is, therefore, important to avoid certain regions becoming breeding grounds for disruptive activities. Specific actions are required in these regions to mitigate the potential risks of political instability if youth unemployment is to be tackled in a sustainable manner. The positive relationship between youth unemployment and primary and secondary school enrolment rates implies that the general education curricula should be revised to provide more employment opportunities for those who cannot access higher education.

## Redefining unemployment

The wide gap between the youth unemployment rate and the non-employment of young people in Côte d'Ivoire should prompt the Ivorian authorities to re-examine the definition of unemployment. Although the universally accepted definition of youth unemployment allows for easier comparison between countries, African States in general and Côte d'Ivoire in particular must consider the prevailing situation in their respective countries for a better definition of unemployment. They must consider the non-employment of young people while formulating their policies with a view to combating youth unemployment.

## Collection and storage of good quality data on youth unemployment

One of the main challenges in conducting studies on youth unemployment in Africa in general and in Côte d'Ivoire in particular is the lack of data. Lack of data made it impossible for us to conduct econometric analysis over a long period of time. Therefore, it is important to reflect on how to regularly collect and store good quality data on youth unemployment so that studies can be conducted and appropriate policies developed to combat youth unemployment in Côte d'Ivoire.

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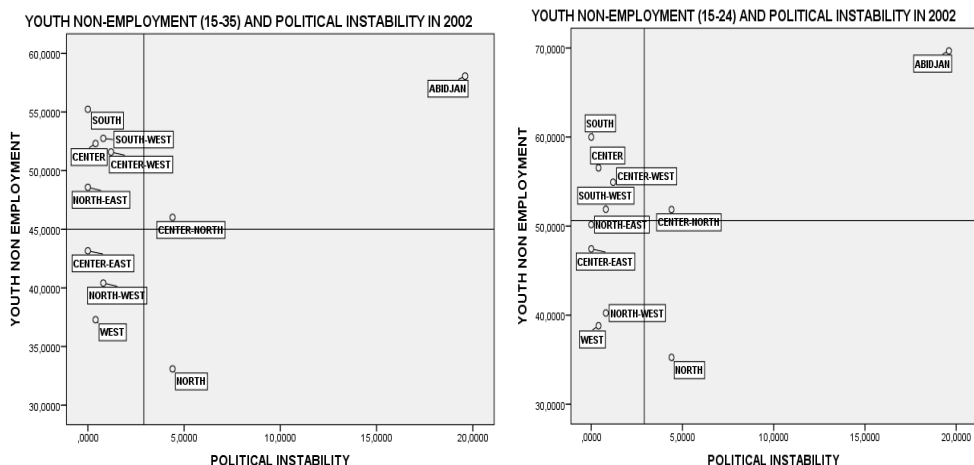


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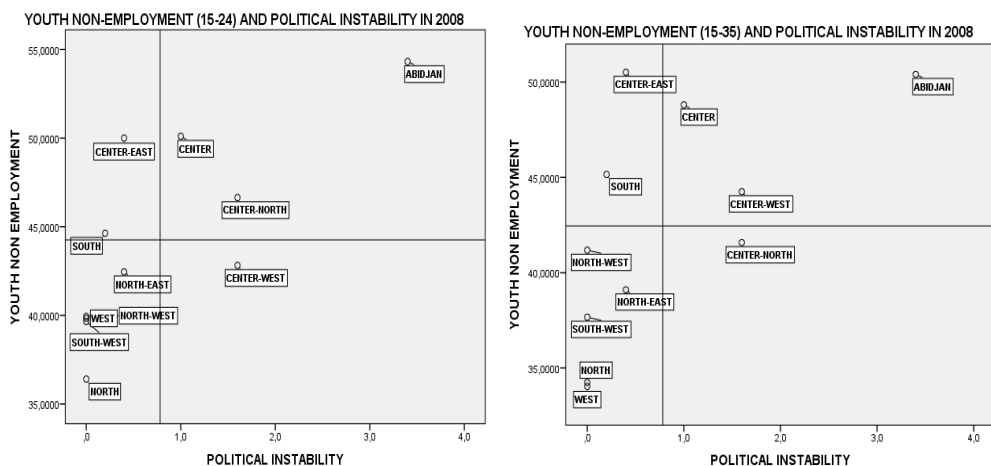
# Annexes

Figure A1: Political instability and non-employment of youth in the regions of Côte d'Ivoire in 2002



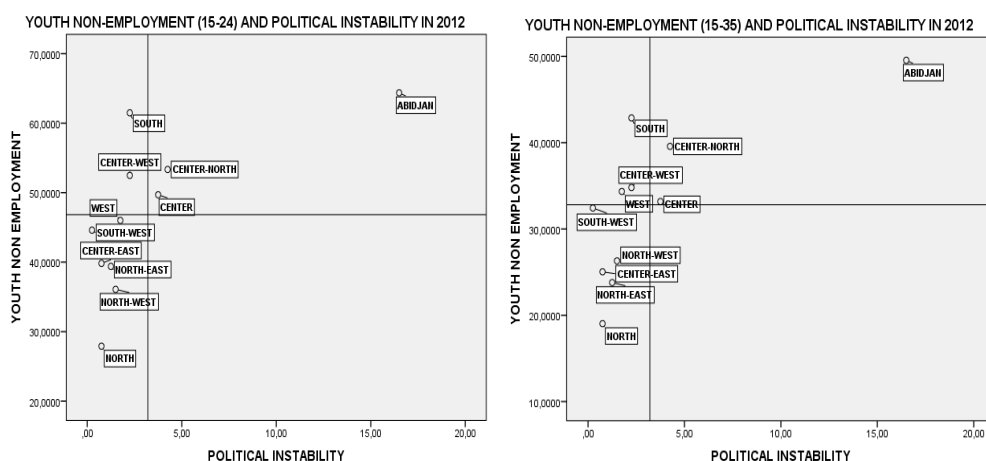
Source: Author's calculation.

Figure A2: Political instability and non-employment of youth in the regions of Côte d'Ivoire in 2008



Source: Author's calculation.

Figure A3: Political instability and non-employment of youth in the regions of Côte d'Ivoire in 2012



Source: Author's calculation.

Table A1: Regional distribution of youth unemployment and non-employment rates in Côte d'Ivoire from 2002 to 2012

Years	Regions	Unemployment		Non employment	
		15–24 years	25–35 years	15–24 years	25–35 years
2002	Abidjan	6.34	11.85	69.67	58.06
	South	1.67	5.27	60	55.23
	Central-West	1.81	4.78	54.93	51.59
	North	0.94	3.28	35.25	33.09
	Central-North	3.70	7.07	51.85	46.02
	Central-East	1.16	4.97	47.44	43.16
	West	2.41	7.06	38.80	37.28
	Central	1.79	4.07	56.54	52.31
	North-East	0.86	1.86	50.17	48.58
	South-West	2.03	3.63	51.88	52.75
	North-West	0.45	1.87	40.24	40.41
	Côte d'Ivoire	2.11	5.06	50.62	47.13

2008	Abidjan	9.68	21.03	54.32	50.40
	South	7.78	13.59	44.63	45.15
	Central-West	4.81	7.78	42.82	44.25
	North	6.01	6.28	36.41	34.24
	Central-North	5.47	7.24	46.64	41.58
	Central-East	6.76	9.87	50	50.51
	West	6.48	8.87	39.83	34.03
	Central	3.95	12.28	50.10	48.81
	North-East	3.33	8.51	42.46	39.10
	South-West	6.34	12.64	39.66	37.66
	North-West	1.55	2.79	39.94	41.18
	Côte d'Ivoire	5.65	10.08	44.25	42.45
2012	Abidjan	12.08	15.49	64.36	49.54
	South	6.62	6.63	61.49	42.86
	Central-West	6.93	6.03	52.48	34.80
	North	1.90	1.45	27.91	19.03
	Central-North	2.5	4.49	53.33	39.57
	Central-East	5.73	5.69	39.83	25.03
	West	7.85	7.32	46.00	34.35
	Central	6.36	5.28	49.69	33.17
	North-East	1.12	1.51	39.38	23.79
	South-West	10	9.40	44.6	32.43
	North-West	3.19	2.74	36.08	26.31
	Côte d'Ivoire	5.84	6.01	46.83	32.81

Source: Author's calculation based on ENV and AGEPE data.

Table A2: Trends in youth non-employment by region from 2002 to 2012

Regions	2002–2008		2008–2012	
	15–24 years	25–35 years	15–24 years	25–35 years
Abidjan	-28.26	-15.18	15.61	-1.74
South	-34.43	-22.32	27.41	-5.34
Central-West	-28.29	-16.58	18.42	-27.15
North	3.16	3.34	-30.46	-79.94
Central-North	-11.16	-10.66	12.54	-5.08
Central-East	5.12	14.56	-25.54	-90.77
West	2.58	-9.56	13.41	0.92
Central	-12.84	-7.17	-0.82	-47.11
North-East	-18.17	-24.23	-7.80	-64.38
South-West	-30.83	-40.04	11.08	-16.14
North-West	-0.75	1.87	-10.69	-56.53
Côte d'Ivoire	-28.26	-15.18	15.61	-1.74

Source: Author's calculation.

(Footnotes)

- 1 Democratic Party of Côte d'Ivoire — African Democratic Rally (PDCI-RDA)
- 2 Ivoirian Popular Front (FPI).
- 3 Patriotic Movement of Côte d'Ivoire (MPCI).

## Notes

- 1 National Institute of Statistics (INS).
- 2 Armed Conflict Location and Event Data (ACLED): <http://www.acleddata.com/data/version-4-data-1997-2013/>.
- 3 ILO (2014), “Key Indicators of the Labour Market (KILM) Eighth edition”, Geneva, International Labour Office.
- 4 International Country Risk Guide methodology is available at <https://www.prsgroup.com/about-us/our-two-methodologies/icrg> (accessed on 3 May 2015).



## Mission

To strengthen local capacity for conducting independent, rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

The mission rests on two basic premises: that development is more likely to occur where there is sustained sound management of the economy, and that such management is more likely to happen where there is an active, well-informed group of locally based professional economists to conduct policy-relevant research.

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