

Youth Employment and Economic Growth in WAEMU Countries

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Abstract

This paper apprehends the bidirectional relation between youth employment and economic growth in the WAEMU countries over the period 1991 to 2015. An empirical analysis with panel data indicates that economic growth rate impacts negatively and in an insignificant way youth employment ratio, but this youth employment ratio is not able to significantly boost an economic growth rate. There is therefore the possibility of economic growth without employment in the WAEMU countries. The econometric results show that domestic investment and the current account balance are the most important determinants of job creation among young people. As for youth unemployment rates and the official exchange rate, they act negatively. On the other hand, foreign direct investment, the added value of the agricultural sector in GDP, official development assistance and the rate of inflation have no influence on youth employment ratio. Thus, the results of our estimates show a positive and significant impact of domestic investments and the growth rate of the money supply. In addition, econometric analysis reveals a negative relationship between foreign direct investment and economic growth rate. We found an insignificant influence of youth unemployment rate, trade openness rate, official development assistance, official exchange rate, and the added value of the agricultural sector on the economic growth rate of WAEMU countries.

Keywords: Youth Employment, UnemploymentRate, Economic Growth, WAEMU

JEL Classification: J64, E24, O40, 055

Introduction

Youth unemployment and underemployment are among the main problems faced by the majority of countries around the world in general and developing countries in particular. This is why the United Nations has set as its 8th target in the SDGs to "promote sustained, shared and sustainable economic growth, full and productive employment and decent work for all". Economic science has always noted in theoretical and empirical analysis the importance of youth employment in economic dynamism. In theory, two schools formally oppose each other. The classical theory with Pigou A. (1905) in "the theory of unemployment", which estimates that the level of labor supply is determined by equalizing the marginal wage of an additional hour of work and the marginal utility of an hour of leisure. In this situation, the author concludes that the lack of rigidity in the economy automatically leads to a full-employment equilibrium, and therefore any unemployment can only be voluntary.

On the other hand, the Keynesian theory, particularly Keynes (1936), argues that the level of employment is not determined by the equilibrium wage, after the confrontation between supply and demand, but rather by the economic situation, through the variation of what he calls "effective demand". There is no reason why the number of jobs offered as a result of decisions to invest in companies should match the size of the labor force, which leads to "involuntary" unemployment. So a balance of underemployment is possible and is probable.

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Economic growth stimulates job creation, but job creation exists in some way on its own. In practice, Africa has the highest proportion of young people in the world. It is estimated that between 10 and 12 million young people enter the labor market every year. As youth employment has become a key issue in our countries, it is often the responsibility of policy makers to develop strategies and reliable employment policies. This is why African governments are striving to ensure that decent job creation is at the same level as population growth. In the WAEMU Zone, the employment problem, especially the employment of young mansions, is crucial and constitutes a major challenge for member states. The implementation of employment policies, followed by the creation of structures and the setting up of specific funds for job creation for young people, is part of the implementation of policies to stimulate economic growth. Despite this, youth unemployment and poverty are still prevailing. Indeed, strong growth is not enough to guarantee productive employment for all. In the annual report of CBWAS(2016), for the whole of 2016, the economic growth of the Union was estimated at 6.8%, after 6.6% in 2015 to reach 7, 0% in 2017. Even with these statistics of economic growth, youth unemployment is still substantial in WAEMU. How could an increase in economic growth contribute to youth employment (reduce unemployment or increase the youth employment rate) and inversely? The general objective here is to find the bidirectional relation between youth employment and economic growth in UEMOA countries. Specifically, it will be:

- to identify the main indicators of the employment situation of young people;
- to analyze the variables that influence youth job creation and those that also have an impact on economic growth;
- to assess the bidirectional impact between economic growth and youth employment creation

While the weakness of the sub-Saharan African banking system has spared them from the effects of the global financial crisis, the savings gap and the huge investment needs are a constant reminder of the need for effective resource mobilization to finance the development and accelerate the structural transformation of their economies. It should be noted that although the debate is not recent, the results reported in the empirical literature are often inconclusive. In addition, very few studies focus specifically on developing countries, and generally do not explicitly include the quality of institutions. It is important then to examine the determinants of financial development, including their links to growth, but also to institutions.

1. Review of theoretical and empirical literature

1.1. From Okun's initiation (1962) to the problems of natural unemployment, frictional unemployment and exclusion

However, it is increasingly admitted, after the publication of the work of Pitarides (1990), that in the short term economic growth can promote job destruction, creating frictional unemployment. This result allows us to remember that the appearance of new technologies in the labor market leads to the uselessness of all jobs related to old technology. In this sense, Alain Minc (2000) claimed that the machine does not kill jobs, it forces it to move and reward itself, initiatives are only to be taken to meet new needs for new jobs to be created, leading to the disappearance of the old.

In contrast, in order to stimulate production and therefore growth, the Keynesian school and Keynes (1936) emphasized the need to increase demand and therefore increase wages first. These Keynesian recommendations, different from those of the neoclassical, believe that wages must be flexible and adapt to the conditions of supply and economic fluctuations. Indeed, the Keynesian school states that a fall in wages (with a view to creating employment) can have a very negative impact on demand, which would reduce production and eventually lead to a decrease in employment. For Keynes (1936), demand is the main determinant of the level of production and consequently of employment. Rewarded for their work on the labor market, Diamond et al. (2010,) took up this theory and managed to show that it is employment that depends on GDP growth, simply because it is the companies that decide to hire according to their production prospects.

However, Erickson (1997) argues that the relevant question is not whether growth creates or destroys jobs, but to know under what conditions an arbitrage is possible between GDP growth and employment. In other words, can we simultaneously increase production and employment?

In response, Guy AZNAR (1996) is one of the authors who elucidated this relationship by explaining that the pace of growth of the activity automatically leads to an increase in the volume of employment.

For him, the more we produce and the more we hire. On the other hand, Martine Aubry (1994) believes that the problems of unemployment and exclusion will not be solved by economic growth alone. Nevertheless, growth is essential to generate activity and jobs. It increases the volume of goods and services available to meet needs and facilitates changes as it creates surpluses.

Concretely, Milton Friedman (1968) states that natural unemployment is the one that would ultimately result from the system of equations representing Walrasian equilibrium corrected for the true structural characteristics of the labor market and goods markets, and their imperfections.

1.2. Potential determinants and sensitivity (elasticity) of the links of employment and economic growth

The analysis of the most important controversies sheds light on the positive effects of employment and economic growth on the one hand and on the other the adverse effects. Regarding the determinants of employment, Dopke (2001), in his analysis of the European Union, shows that the share of services in GDP growth, real labor costs, labor market institutions and volatility of the exchange rate are given as potential determinants of employment intensity. He also argues that an increase in the service sector leads to an increase in employment in relation to growth.

In terms of the sensitivity of employment to growth, Kapsos (2005) estimates that the elasticity is generally between 0 and 1. Moreover, when it comes close to unity, the country's growth is considered intensive in employment. On the other hand, it is assumed to be capital intensive when the elasticity approaches zero (Khan, 2001, UNDP, 2009).

Furthermore, Harman (2011) empirically analyzed the effect of economic growth on employment in European Union countries, between 2000 and 2010. He found a low elasticity of employment in relation to economic growth.

Regarding sensitivity measurement, some empirical investigations were also conducted in three stages, first on a wide panel of developing countries, then on a panel composed only of the countries of the Middle East and North Africa and finally in time series, country by country, on the three economies. The research of Berthomieu et al. (2012) on Egypt, Morocco and Tunisia show the positive link between GDP per capita and employment, as well as a link between GDP and openness to the outside world. However, the intensity of these links in terms of elasticity, measured by their econometric tests, remains weak, for most of these links.

Moreover, Swane and Vistrand (2006), using the employment-to-population ratio as a measure of the extent of job creation, studied the relationship between GDP and employment in Sweden and they proved a significant and positive relationship. Their conclusion confirms the theory that the positive relationship between GDP and employment is normal and that any jobless growth relationship could be a temporary deviation. So, would not it be useful to study the causality between employment and GDP?

The works of Meloche et al. (2009), study public sector employment and regional economic growth in Canada by raising some limitations inherent in the spatial regression methodology they used. From an analysis of a spatial correlation and a multiple regression, they confirm a positive and significant relationship between public sector employment and regional growth in per capita incomes in Canada.

In an analysis with a VAR model, Vincent Bodart et al (2008) show how much the quarterly growth rate of employment varies following a permanent variation in the quarterly growth rate of economic activity with data from Belgium. They also found that economic growth does have a positive effect on employment growth at both national and sectoral levels. On the other hand, MbaFokwaArsène (2016), in his analysis of monetary stability and economic growth in the CEMAC zone, argues that there is a negative and significant impact of economic growth.

In fact, according to Yogo (2008), employment issues in sub-Saharan Africa are essentially issues of quality rather than quantity. He argues that the reason for the weakness in employment performance is not reflected in the rigidity of the labor market, but that the increase observed in the working poor could be explained by the sluggish economic growth over time. For the case of Ivory Coast specifically studied between 1975 to 1995, N'Zué Felix Fofana (2012), using an error-correction model, manages to show first that economic growth and employment in the modern private sector do not evolve together in the long run.

Then he defends the possibility of jobless growth in Ivory Coast. But he also shows that there is a negative correlation between the rate of economic growth and official development assistance. Finally, he asserts that the official development aid received was not used for employment in general.

A decade ago, Beaudry and Collard (2002) studied the links between labor force growth and productivity and found a negative relationship between these variables. However, they suggest that if the domestic economy is integrated into the world economy, this effect diminishes because of the convergence of capital between countries.

In an analysis on performances in the euro area economies, Mourre (2004) explains that the labor intensity of growth is high in the service sector. he finds a negative correlation between the labor market tax ratio and long-term employment. He also confirms that real labor costs increase the elasticity of employment in the area, and suggests that labor market reforms and structural changes could play a role in euro area employment performance. The calculation of the Okun coefficient for all OECD countries by Lee (2000) reveals that the relationship is not constant over time, but the influence of growth on employment is confirmed and varies from country to country.

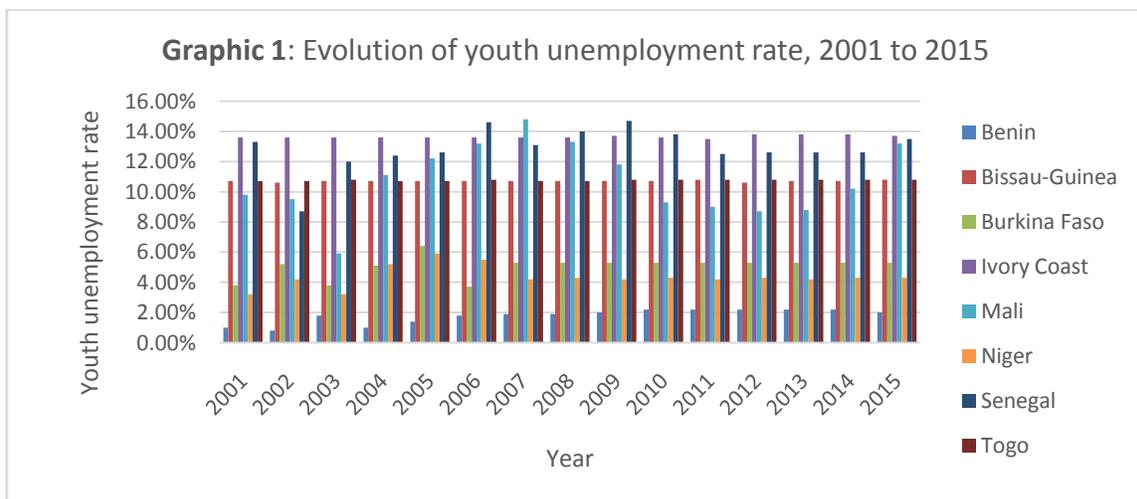
In the same vein, when studying it on the monetary policy, price stability and development of economic activity in the CAEMC Zone MbaFokwaArsène et al. (2014) found results obtained from regressions on the panel data over two sub-periods which show, in the first half-year, a positive and insignificant impact of employment on the rate of economic growth, on the other hand in the second half-year and in the whole period the existence of a negative and significant relationship of employment on the economic growth rate.

2. Exploratory analysis of trends in unemployment rates, youth employment ratio and the economic growth rate in the Union.

2.1. Evolution of the youth unemployment rate (15-25 years)

We find that Ivory Coast and Senegal have the highest unemployment rates during the period of analysis. However, Ivory Coast recorded an almost stable rate at around 13%, while in Senegal we note a fluctuation around 8.70% (2002) to 14.70% (2009). In Benin, Burkina-Faso and Niger, the lowest unemployment rate is found, more specifically in Benin, with a rate of less than 3%. This low rate in these three countries may be related to the fact that many people have given up looking for work because of the lack of job opportunities in the labor market. In other words, it is an increase in the proportion of discouraged unemployed. Guinea-Bissau and Togo record almost the same statistics, which amount to 10.80% for the whole period. In general, despite the authorities' anti-unemployment policies, the general trend indicates that all countries, taken individually, consistently have rising youth unemployment rates.

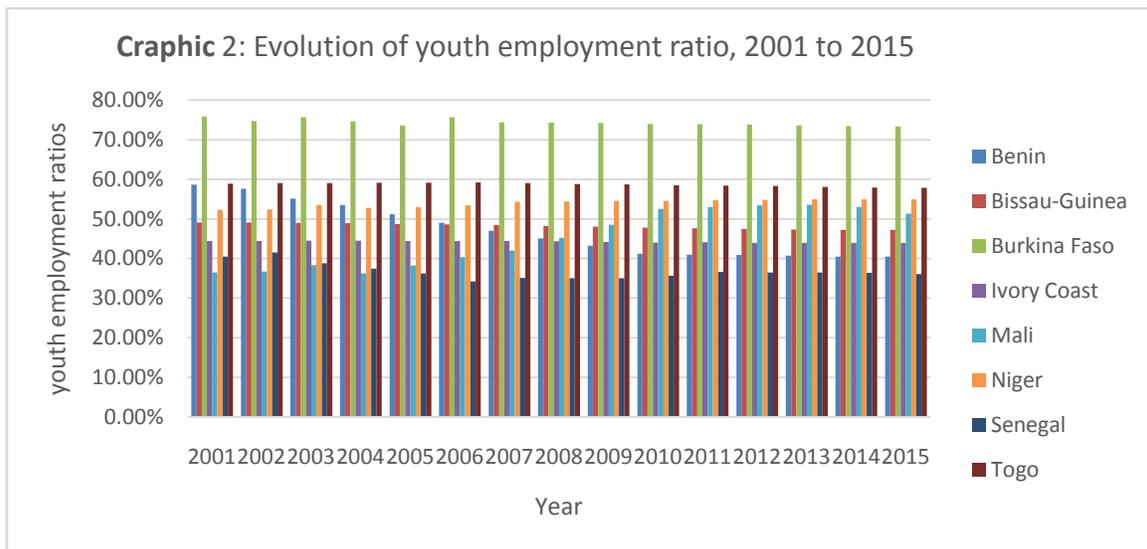
The graph below shows the increase in the youth unemployment rate in WAEMU countries, which is of ups and downs throughout the period considered.



Source: Author's estimate based on World Bank data (2016)

2.2. Youth employment ratio performances (15-25 years)

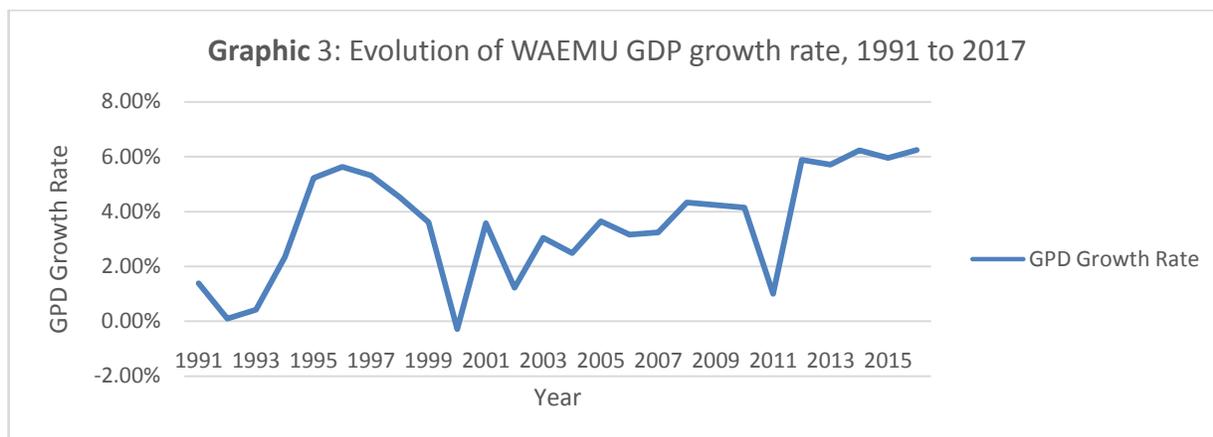
The trend in youth employment ratios, observed in the countries of the Union during the years 2001 to 2015, is shown in the graph below. Burkina Faso recorded the highest ratio of employment during the period of our analysis with a fairly high value of 77, 70% in 2003 and 2006 compared to the lowest value of 73.30% in 2015. For Other countries, notably Ivory Coast, Niger and Guinea-Bissau, the ratio is volatile and remains below 30%. In Togo, the best performances in youth employment ratio after Burkina Faso is recorded. However, we note that there is stagnation for the entire period that is around 57.80% and 59.20%. Senegal has the lowest ratio of youth employment in the period 2001 to 2007. This weakness is linked to the poor performances of the agricultural sector between 2002 and 2006, which concentrates a significant proportion of the active population of 45,7%. The situation does not improve even after 2007, because after the various initiatives, its employment ratio remains the weakest of the union next to that of Mali.



Source: Author's estimate based on World Bank data (2016)

2.3. Situational Analysis of WAEMU's Economic Growth Rate.

The economic growth rate of all WAEMU countries is changing. The period 1991 to 1993 is marked by a low growth rate which ranged between 1.38% in 1991 and 0.42% in 1993, because of the 1994 devaluation crisis and was automatically followed by the period from 1994 to 1999 where a revival of economic growth is noted. In 2000, the union recorded a negative growth rate, due to a fall between 1999 and 2000. However, during the period from 2001 to 2010, the growth rate began to decline, falling from 1.23% in 2002 to 4.13% in 2008 before relapsing between 2010 and 2011 from 4.14% to 1%. This last situation is due to the crises that affected the great powers of the Union, among others the pre-electoral crisis of Senegal and post-election of Ivory Coast in 2011. We note during the period from 2012 to 2017 a remarkable evolution of the rate of economic growth, marked by a high level more precisely in 2017 of about 6.8 6% pulled by Senegal (6.8%) and Ivory Coast (7.8%).



Source: Author's estimate based on CBWAS data (2017)

3. Methodology

3.1. Theoretical framework

The model to be estimated is a dynamic panel of youth employment and economic growth. Based on Okun's law (1970) and Lucas's (1988) model on the one hand, this model draws on Pichette's (1998) work on asymmetric responses in the labor market in Canada and on the works of Kahn and Knight (1991) on the other hand and is worded as follows:

$$REJ_{it} = \beta_0 + \beta_1 REJ_{it-1} + \beta_2 TPIB_{it} + \beta_3 TCJ_{it} + \beta_4 INVD_{it} + \beta_5 IDE_{it} + \beta_6 BC_{it} + \beta_7 OUV_{it} + \beta_8 TCH_{it} + \beta_9 VAG_{it} + \beta_{10} IPC_{it} + \beta_{11} APD_{it} + \epsilon_{1it} \quad (1)$$

With β_0 the constant, β_1 to β_{11} the coefficients of the exogenous variables, ϵ_{1it} the error term of the fixed effects model.

$$TPIB_{it} = \alpha_0 + \alpha_1 TPIB_{it-1} + \alpha_2 REJ_{it} + \alpha_3 TCJ_{it} + \alpha_4 INVD_{it} + \alpha_5 IDE_{it} + \alpha_6 OUV_{it} + \alpha_7 TCH_{it} + \alpha_8 VAG_{it} + \alpha_9 APD_{it} + \alpha_{10} M2_{it} + \epsilon_{2it} \quad (2)$$

With α_0 the constant, α_1 to α_{10} the coefficients of the exogenous variables, ϵ_{2it} the error term of the random effects model.

3.2. Choice of variables³ and data sources

In the light of the literature review, the possible relationships between employment and economic growth bring into play the variables we will use in our two models and recorded in the following table:

Table 1: variables and measures

Variables	Measures
REJ	Ratio of employment of young people aged 15-24
TPIB	GDP growth rate
TCJ	Unemployment rate of young people aged 15-24
INVD	Domestic investments
IDE	Foreign direct investment
BC	Current balance
OUV	Commercial opening rate
TCH	Official exchange rate
VAG	Added value of the agricultural sector
IPC	Inflation rate
APD	Official development assistance

Source : Author

³The variables INVD, IDE, BC, APD and VAG are as a percentage of GDP.

The data used come from the database of the World Bank (2016) and CBWAS (2017). The series cover the period from 1991 to 2015.

3.3. Descriptive statistics

Official development assistance as a percentage of GDP shows during the reference period a maximum value of 78.71% and a minimum value of 0.55%. We also notice an average of 12.76%, with a dispersion that turns around 10.23%. It can therefore be said that, in general, official development aid contributes considerably to the economies of WAEMU countries.

Table 2: Descriptive statistics

variables	Obs	Average	standard deviation	Minimum	Maximun
GDP growth rate	200	3.735471	4.285412	-28.09998	15.37624
Unemployed rate	200	8.7715	4.24396	.8	15.5
Employment Ratio	200	51.9055	11.44753	34.2	76.2
Investissmct domesticated	200	16.94252	9.803828	1.856043	47.14962
Direct investment & ranger	200	2.06135	2.720344	-2.13816	19.37574
Current Balance	200	-10.20997	8.907898	-45.2094	16.48508
Rate opening	200	32.08486	10.12897	11.32648	59.74176
Exchange rate	200	567.2522	382.0008	9.909492	2225.47
value added sector agricultural	200	33.6872	9.809917	13.77404	62.38273
Price index A consorrnation	200	6.103322	12.12443	-9.823833	80.89967
Official Development Assistance	200	12.76672	10.22868	.5554726	78.70716
Growth of the Money Moneys	200	12.20071	16.93606	-64.85575	105.4054

Source: Author's calculation from World Bank data (2016)

3.4. Specification of the model

The use of the panel data in our sample, in our approach to the specification of our estimation models passes through the Hausman test to make it possible to choose between the random effects model and the fixed effects model. The hypothesis test is as follows and the results are in appendices in Table 2.

H_0 :: The random effects model (GCM estimator)

H_1 : The fixed effects model (Estimator Within)

On the youth employment model, we reject the null hypothesis because its critical probability is zero (below all conventional thresholds). In this case the fixed effects model is retained with the Within estimator. In terms of the economic growth model, the probability associated with the Hausman test is 0.9967. So we accept the null hypothesis of the random effects model and retain the MCG estimator. In addition, the introduction of lagged variables ($TPIB_{it-1}$ and REJ_{it-1}) makes it possible to take into account the economic performance and the evolution of youth employment achieved in the previous year and the integration of an anticipation scheme into the equations (trend phenomenon). The expected signs for these variables are positive.

The hypotheses of our work are as follows:

H1: Economic growth has an effect on youth job creation

H2: the ratio of youth employment has a significant impact on economic growth

H3: Domestic investment and the current account have significant effects on youth job creation

H4: Money supply and foreign direct investment have a significant influence on economic growth

3.5. Results and discussions

In addition, the youth employment ratio, whose sign of the coefficient is the one expected, remains relatively very low (0.0138). It has a positive and insignificant impact on the rate of economic growth. In other words, the share of youth employment in WAEMU does not significantly boost economic growth. This result confirms that of MbaFokwaArsène et al. (2014) showing that in the first half-period considered a positive and insignificant impact of employment on the growth rate is observed in the countries of the CEMAC zone. So our results allow us to reject our hypothesis 2.

So, youth unemployment rate impacts negatively and significantly the 1% threshold on the youth employment ratio. So, a 10% increase in the youth unemployment rate in relation to the total population results in a 3.08% decrease in the youth employment ratio. According to several results, the unemployment rate in WAEMU is generally dominated by young people. Admittedly, the population is mostly young, but what is particularly alarming is that this mass unemployment is affecting young graduates more. In WAEMU, this is reflected by unemployment rate which is growing among students after their university studies. In reality, this unemployment rate for young graduates is due to the fact that the training provided does not meet employers' expectations. There is therefore a real problem of adaptation between university courses and real jobs in companies. There is also the problem of illiteracy, which also creates another category of people in the population who cannot read or write. In this sense, the case of Senegal studied in a 2012 CEPOD report on the diagnosis of employment in Senegal observes that nearly half of the population aged 15-35 cannot read and write and that this situation affects women more (57.4%), even if this rate is smaller than for those aged over 35.

On the other hand, a result of Okun (1962) obtained in the United States shows an inverse relationship between economic growth and youth unemployment rate, whose impact is positive and not significant.

With regard to domestic investments and the current account, their impact is positive and significant respectively at the 5% and 1% threshold on youth employment ratio. Domestic investments and trade are generally both aimed at job-creating sectors. These results clearly show that banking and non-banking financial institutions in WAEMU play a key role in the creation of youth employment. This confirms our hypothesis³ that domestic and current account investments are youth employment providers. This result supports that of Richard Ferdinand Kahn (1991) arguing that the creation of jobs, on the occasion of new investments, showed an amplified creation of jobs in the other industries. With the expected effect, domestic investment positively and significantly impacts economic growth rate at 10%. So if domestic investment increases by 10%, economic growth rate would increase by 1.852%. An increase in investment leads to a rise in national income, which increases consumption. This rise in consumption in turn increases production, which is reflected in an increase in national income and therefore in economic growth. This is the effect of the Keynesian multiplier.

In addition, the coefficients associated with money supply and foreign direct investment are respectively 0.0649855 and -0.2917576 and have a significant impact on economic growth rate. Thus, a 10% increase in money supply will lead to a 0.6498% increase in economic growth rate. We can therefore say that the monetary authorities of the WAEMU countries play a considerable role in economic growth rate. The money supply result is consistent with those of Blackburn, Pelloni and Hsing in 2005, which prove that the money supply has a significant and positive influence on real GDP. On the other hand, our results reveal that foreign direct investments as directed are a drag on economic growth. Because a rise of 10% leads to a decrease of 2.91% on economic growth. These results, on the one hand, match those of Jude and Levieuge (2013) showing that foreign investments, independently, do not promote economic growth but, when they interact with other macroeconomic and/or institutional variables, their impact on growth is positive and significant.

In the agricultural sector, it is generally an important lever for job creation and economic growth. In our results, we find that the added value of the agricultural sector in the GDP reacts in a positive and not significant way in the youth job creation but also on economic growth rate.

According to our results, the relationship between official development assistance as a percentage of GDP and youth employment ratio is insignificant and positive, but reacts negatively and not significantly in terms of economic growth. In countries with good management of development funds, they help create quality jobs, reduce poverty and generate growth. These results challenge the need for official development assistance to be focused on the productive and job-generating sectors. Our results are similar to those of Felix N'Zue (2012), who says that in Ivory Coast, the official development assistance received was not used for employment in general. As regards trade openness rate, it acts positively on youth employment, and negatively on economic growth, but without significant impact in both cases. In employment, it should be noted that this positive impact is due to the fact that trade in the WAEMU countries occupies a considerable part of the youth. The results are similar to those of Nadia Lemzoudi (2005) who asserts that there is a negative relationship between openness to international trade and growth rate for the three landlocked countries that are Burkina Faso, Mali and Niger.

In the same vein, Igor Oliveira dos Santos (2006) proves that exports significantly promote job creation in Brazil. Several subsequent studies on the determinants of economic growth prove the opposite by showing satisfactory results of the trade openness rate on economic growth. It is to be noted that the virtues of commercial openness were first magnified by the classics with authors such as Adam Smith who advocated free trade. So the opening of a country is a very important factor in the eyes of foreign investors to the extent that they can in case of relocation enjoy the freedom to export without hindrance, their production depending on the motivation of their investment or import from other countries the goods necessary for their production.

As regards official exchange rate, its influence is negative on economic growth rate and on youth employment ratio in WAEMU countries, even if its impact is not significant for the former. This result confirms the position of Friedman (1968) showing that the effect of monetary policy is therefore neutral in the short term.

In sum, Table 2 in the appendixes shows the fixed effects associated with each WAEMU country and indicates that Burkina Faso (75.01%), Mali (42.66%) and Togo (296, 71%) structurally have the highest youth employment ratios, while Benin (-297.61%) and Niger (-121%) have the lowest ratios.

Table 3: Results of econometric regressions (fixed effects and random effects)

Variables	Fixed effects model: Youth employment ratio	Random effects model: The economic growth rate
REJ	/	.0138091 (0.678)
REJ(-1)	.9182087 (0.000)***	/
TPIB	-.0229773 (0.315)	/
TPIB(-1)	/	-.0344577 (0.622)
TCJ	-.3008374 (0.000)***	.0215964 (0.835)
INVD	.0330232 (0.046)**	.1852473 (0.000)***
IDE	.0100898 (0.832)	-.2917576 (0.032)**
BC	.0779716 (0.000)**	/
OUV	.0023973 (0.922)	-.0076076 (0.881)
TCH	-.0011494 (0.050)*	-.0002969 (0.751)
VAG	.0014782 (0.956)	.0204093 (0.463)
IPC	-.0119313 (0.250)	/
APD	.024249 (0.114)	-.0238896 (0.518)
M2	/	.0649855 (0.000)***
Constant	7.342218 (0.000)***	-.3769081 (0.895)
R-sq: Within	0.9399	/
R-sq: between	/	0.8843

Values in parenthesis are probabilities.

Source: Author's estimate; *** $p < 1\%$, ** $p < 5\%$, * $p < 10\%$

Conclusion

The creation of decent jobs for young people and economic growth rate are nowadays, despite the debates, a criterion of choice for evaluating the performance of a country. We have addressed a specific aspect of this question whose general objective has been to find the bidirectional relation between youth employment and economic growth in the WAEMU countries. In our work, we have diagnosed the effect of different variables on the ratio of youth employment and economic growth rate using two dynamic panel models in WAEMU countries.

Our results have confirmed that there is a possibility of jobless growth for young people in the WAEMU countries, on the one hand, and on the other hand the creation of youth employment which does not have a significant impact on Economic Growth. This shows that economic growth is generally achieved in sectors that do not generate enough jobs for young people.

Furthermore, domestic investments and the current account are the most important determinants of youth job creation. On the other hand, we find a negative and significant impact of the youth unemployment rate and the official exchange rate. There was also a lack of influence of foreign direct investment, added value of the agricultural sector in GDP, official development assistance and inflation rate on youth employment ratio. In addition, the results of our estimates show the existence of a positive and significant impact of domestic investments, growth rate and money supply but also a negative and significant impact of foreign direct investment on the economic growth rate. We find an insignificant influence of youth unemployment rate, trade openness, official development assistance, official exchange rate, added value of agricultural sector in GDP on economic growth rate countries of WAEMU.

So, for the promotion of decent job creation, sustainable improvement of economic growth and youth living conditions in WAEMU countries, the results of our estimations argue in favor of the implementation growth and competitiveness strategy that provides employment, especially for young people. Then, the monetary authorities must ensure that banks and institutions are at the service of business and industry by promoting investment. It is also necessary to think about the promotion of exports of goods and services to settle the deficit of the external balance by stimulating the growth of the production. Also, despite the fact that our model has not shown a significant influence of foreign direct investment on the employment ratio, governments will have to encourage a policy of attraction and efficiency of foreign direct investment. Finally, efforts still need to be made in institutions dedicated to youth job creation in order to reduce the high level of youth unemployment in the WAEMU countries.

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Annexes

Table 4: Hausman test results

Econometric Elements	Model of the Youth Employment Ratio	Economic growth model
Hausman's statistics	47.65	1.95
Probability	0.0000	0.9967

Source: Author's estimate

Table 5: Summary of fixed effects associated with WAEMU countries

Countries	Fixed effects (Job Model)
Benin	-297.61%
Burkina-Faso	75.01%
Ivory Coast	-31.82%
Guinea-Bissau	34.60%
Niger	-121.81%
Mali	42.66%
Senegal	2.25%
Togo	296.71%

Source: Author's estimate