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Financial Liberalization and Financial Development : Does World Financial Crisis consistently stifle Economic Growth in West African Economic and Monetary Union ?

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Abstract

The purpose of this study was to investigate the effect of international financial integration, financial development and world financial crisis on economic growth in the West African Economic and Monetary Union (WAEMU) for the period 1990-2020. Employing Panel Fixed-effects regression / Driscoll-Kraay standard errors technique, the findings of this study reveal that international financial integration and world financial crisis have a positive and statistically significant effect on economic growth in the region. However, financial development has a positive and insignificant influence on economic growth. The results further indicate that inflation and trade openness have a negative impact on economic growth in the region while local currency depreciation has a positive and significant effect on economic growth. Arising from these findings, this study recommends that the central bank of the monetary union employs a combination of monetary and fiscal policies in order to address

the issue of financial crisis, trade openness and inflation problem so as to boost economic growth in the countries under investigation.

Keywords: *International Financial Integration, Financial Crisis, Financial Development and WAEMU*

INTRODUCTION

Despite impressive studies on international financial integration, foreign capital flow and its effects on the economic growth for developped, emerging and developping countries; the countries under monetary union still need a further investigation since the exchange rate as an adjustment tool in the presence of asymmetric shocks is no longer a shock absorber. This implies therefore, shocks can be transmitted across member countries through financial channels, hence may lead to financial crisis that spread rapidly from one country to another. Since the monetary policy is set by the central bank of the Union, then it can be restrictive for some countries and expansionist for others depending on inflation in each country (case of Euro countries in 2009). Even budget policy or fiscal policy in each country may have adverse effect on economic growth stimulation.

Neo-classical theory suggested that financial integration may increase income and well being in countries that benefit from foreign capital flow. Hence, emerging and developing countries started since 1990 to remove the exchange control and entry barriers which hinder the foreign capital flow. However, the foreign capital flow in practice had lead to a dramatic consequences for some emerging and developing countries (crisis in southeast Asia in 1997-1998). This is because emerging and developing countries did not have a strong financial system and legal system to reap the economic benefits of financial integration [1,2]. Additionally, Peter and Paul [3] revealed that excessive financial deepening or too rapid growth of credit may have led to both inflation and weakened banking systems which in turn give rise to growth-inhibiting financial crises. Moreover, Caporale *et al.* [4] suggested that the effect of financial integration on economic growth vary depending on factors such as the level of financial development, trade openness, institutional quality, political and economic unceratinty, initial income and financial openness.

The financial crisis that originated from USA (2007) has reignited the debate on financial globalization and made economists to wonder whether the world still need finance? This is because of its devastating effects on countries economic growth, unemployment, budget deficit, public debt through the link of financial globalization. Even, bankruptcy of three banks, namely SILVERGATE, SILICON VALLEY and SIGNATURE BANK in USA during march 2023 has affected the financial market of USA and Europe due to contagious effect. Finance is still indispensable according to neo-classical growth theories, because of its crucial role in economic growth through the channel of capital accumulation and technology innovations.

Despite the substantially decreased of capital inflow in the word during the crisis period, the west African Economic and Monetary Union countries have witnessed mixed experience in terms of capital flow among the member countries. For example the aggregate foreign direct investment inflow in the world was 1906638 million US dollars in 2007 and decreased to 1488308 million US dollar in 2008 and 1173741 million US dollars in 2009 (UNCTAD's yearly statistics). While FDI inflow in Benin and Burkina was 599 million US dollar in 2007 and has been decreasing during the crisis period and turned to 235 US dollar in 2009, almost 61 percent decrease in three years. Mali and Niger have reversed the trend. Their FDI inflow was 202 million US dollar in 2007 and has been increasing and amounted to 1539 in 2009. The remaining four countries, namely Cote d'Ivoire, Guinea Bissau, Senegal and Togo experienced a fluctuation in their FDI inflow.

The economic growth rate has followed the same trend like the FDI inflow. Some countries experienced low or high growth rate while others faced a fluctuation during the crisis period. Benin has gone through a decreasing economic growth during the crisis period, from 6 to 2 percent while Mali and Togo have reversed trend, an increasing economic growth from 3.5 to 5 percent and -1.2 to 5.5 percent respectively. The rest of countries have faced a fluctuation in their economic growth such as Burkina, Cote d'Ivoire, Guinea Bissau and Senegal (Africa development Indicator of World bank). Thus, it is crucial that WAEMU member countries as presented in (**Table 7**) understand the effect of international financial integration, financial development and world financial crisis on economic growth in their Economic and Monetary Union through cross-border financial link in view to set out the appropriate macroeconomic policies which may cushion them against the low rate of economic growth during the period of financial crisis. Numerous studies have investigated the phenomenon in developed and emerging countries (literature) while empirical studies in West African Economic and

Monetary countries are scanty. It was against this background that this study was carried to provide a new insights and contribute to the debate on the long-run economic relationship between international financial integration, financial development and financial crisis in WAEMU region with special focus on the financial development since international financial integration may stimulate domestic financial development due to competition in financial sector. According to inferential statistics, the appropriate econometric method is Panel Fixed-effects regression with Driscoll-Kraay standard errors because this estimator is consistent and efficient under the assumption of cross-sectional and temporal dependence when the time dimension is larger than number of groups like in the current study.

The rest of this paper is organized as follows : section 2 reviews the existing literature ; section 3 presents the methodology (model specification) which enables us to address the effect of international financial integration, financial development and world financial crisis in those countries under study. Section 4 describes the dataset, explains the estimation technique and discusses the results.

2.0 LITERATURE REVIEW

While a significant number of empirical studies attempt to highlight the effect of international financial integration on economic growth in emerging and developing countries, the results show that there is no consensus [5, 6]. Some empirical studies argue that, the relationship between financial integration and economic growth is positive which demonstrates that countries derive some benefit from financial integration through the channel of capital accumulation and the transfer of technology [7, 8]. However, some authors have found a negative relationship between financial integration and economic growth. This is because capital flow to countries which have not well developped infrastructure that may enable them to reap the benefit of capital inflow and in turn may lead to finacial crisis [9].

Sonia and Rossazana [10] conducted a study to examine the relationship between financial integration on economic growth in Asian region before and after the 1997-1998 financial crisis. The study covered the pre-crisis period 1980-1995 and post-crisis period 1998-2015 and for the entire period 1980-2015. The findings indicated a positive and significant finance-growth linkage for the pre-crisis, however for the post crisis and the whole sample results revealed a negative relationship beween financial integration and economic growth. Similary, Inkoo and Jong [7] examined the link between financial liberalization, crisis and economic

growth by combining the results of a panel model with those of a probit model. The authors found a positive net effect from financial liberalization to economic growth and the net effect on growth was suprisingly strong in the crisis experience countries group than in the overall sample group. Lewis *et al.* [11] investigated the impact of financial crisis on European regions and cities by using data from OECD and Eurostat data base. The results showed that the financial crisis led to big contraction in economic growth in urban region and in remote rural region while intermediate and rural region which were closed to cities displayed more resilience.

Additionally, Fatma [9] examined the link between international financial integration and economic growth, comparing advanced and emerging market and developing economies over 1990-2019. The author used the conditional and unconditional growth model. The results indicated that international financial development stimulates (hinders) growth in less (more) financial integrated economies. The results showed that it is not impossible to finance growth with international financial integration, but it might be risky, especially beyond a certain threshold level of international financial integration. Likewise, Binder *et al.* [12] investigated the long-run output effect of international financial integration, taking into account the institutions quality and the level of domestic financial market development. The empirical result indicated that country's output benefit from international integration, conditioned on good governance and developped domestic financial system. Hervé [13] examined the relationship among financial integration, foreign direct investment and economic growth in West African Economic and Monetary Union from 1980 to 2014 period. The author used a dynamic panel system estimator, an ordinary Least Squares method and Two Stages Least Squares method. The findings revealed that foreign direct investment is not an important determinant of economic growth in West Africa. However, financial integration has a negative effect on economic growth in West African Economic and Monetary Union while domestic investment has a positive and statistical impact on economic growth.

Moreover, Angkeara and Gamini [14] investigated the impact of financial integration on economic growth in southeast Asia from 1993-2013. They used the general method of moments in the dynamic panel estimation approch and the EGLS model. The results showed that financial integration has a positive sign and significant effect on economic growth in Southeast Asia. Similary, Joaquin and Juan [15] examined the effect of financial integration on economic growth through financial development in Eu-15 countries over the period 1999-2007. The findings indicated that until the emergence of 2007 crisis, a significant part of

financial development originates from financial integration with a positive impact on economic growth. But during the crisis period, the financial integration has an adverse effect on financial development and economic growth.

Duc Hong *et al.* [16] carried out a study to determine the impact of financial integration on economic growth in China. They used Auto-Regressive Distributed Lags model. The results revealed that there is co-integration between financial integration and economic growth in China. Further, the bidirectional causality between financial integration and economic growth was also confirmed by Granger causality test.

The research of Nayia and Satish [17] examined the direct and indirect effect of international financial integration on economic growth in Indian over the 1981-2011 period. The authors employed the co-integration and Vector Error Correction technique. The results indicated that international financial integration has a direct and an indirect positive effect on economic growth in India through the channel of financial development. Likewise, Amarenda and Anupam [18] investigated the link between international financial integration and economic growth using eleven (11) Asian countries from 1991-2010 period. The results revealed that the effect of international financial integration on economic growth is mixed. However, the results support positive impact of total capital inflows on economic growth for both direct investment and portfolio flows. Schnabel and Seckinger [19] examined the impact of foreign bank and financial crises on economic growth in Europe for the period 2000-2012. The authors found evidence that foreign bank presence had a strong growth effect during the crisis than normal period.

Robert A. Jarrow [20] investigated the impact of financial crisis on economic growth by constructing a simple yet robust model of financial crises and economic growth where financial markets impact on real economic activity. The results revealed that a financial crisis caused by systemic default can shift the economy from an equilibrium with positive borrowing/lending to an equilibrum with no borrowing/lending. A research conducted by Dimitrios and Konstantinos [21], examined the link between financial development and economic growth in 26 Eurepan Union countries for the recent financial crisis. The study stretch from 1990 to 2016 and the authors employed multiplicative dummies to compare two distinct sub-periods before and after the crisis. The results showed that financial development promoted economic growth before the crisis but impeded economic growth after crisis. The findings further demonstrated that capital adequacy of bank protected depositors and promoted the stability of financial system during crisis period 2008 and 2009.

Another reseach conducted by Barro and Bassolet [22], investigated the effects of international financial integration on economic growth in West African Economic and Monetary Union's countries from 1980 to 2019, taking into account the heterogeneous panel evidence. The results showed that stock of external debt and the financial openness affect negatively the long-run economic growth in the region. This might due the misallocation of external capital among these countries.

Ucal *et al.* [23] investigated the impact of the financial crisis on foreign direct investment before and after in developping countries using semiparametric regression procedure. The results showed that foreign direct investment inflow decrease in the year after the financial crisis but a reversal situation in the year before the financial crisis hit the country. While Osei and Kim [24] by employing the dynamic panel treshold model, examined the possible nonlinearity between finance, foreign direct investment and growth in sixty two middle and high income countries from 1987-2016. The results indicated that foreign direct investment boost economic growth in general, but the growth effect vanish when the ratio of private credit to gross domestic product exceed 95.6%.

Overall, the existing empirical studies have clearly demonstrated that financial openness and financial crisis have a favorable and negative influence on economic growth, respectively. However**,** the influence is conditioned on financial institutions quality. Therefore**,** this paper attempts to fill the existing gaps in the literature by using the fixed effect regression with Driscoll-Kraay standard errors developped by Driscoll *et al.*(1998) to determine the economic impact of international financial integration and world financial crisis on economic growth in WAEMU region by controling for financial development which is important in international financial integration. This research is utmost important for WAEMU'countries in policies implementation for their sustainable economic growth and resilience in case of any financial crisis.

3.0 METHODOLOGY

This section present the methodology which was used to investigate the impact of international financial integration, financial development and world financial crisis on economic growth in the Western African Economic and monetary Union. We employed the Panel Fixed Effect model with Driscoll-Kraay standard errors technique because the number of groups (countries) is less than number of years and the data display cross-sectional dependence. We used, especially, the Driscoll-Kraay standard errors framework proposed by

Driscoll *et al.* (1998) because it generates estimates which are consistent and efficient with spatially dependent panel data and large time dimension than groups.

Model Specification

According to the literature review, we set out the following generic function and econometric model that enabled us to investigate the effect of financial integration, financial development and the financial crisis on economic growth in WAEMU region.

a-Function

$$Gdp=f(Fd, Ifi, Inf, Op, Crise, Rexch)$$

Where:

Gdp = Gross domestic product (constant 2015 US$)

Fd = level of financial development of country i at time t, proxy by financial development index;

Ifi = International financial integration proxy by the sum of gross stocks of financial assets and liabilities as a ratio of GDP;

Inf = Annual inflation rate from consumer price index;

Op = Trade openness measured as exports plus imports, as a percentage of GDP;

Crise = a dummy variable that take 1 during world financial crisis (2007-2009) period and 0 otherwise.

Rexch = Real exchange rate between USA dollars and franc CFA (obtained by multiplying the nominal exchange rate with USA's Consumer Price index and then divided by domestic Consumer price index), variable introduced to capture the effect of the franc CFA depreciation;

b-Econometric model

$$loggdp_{it}=\beta_0+\beta_1 logfd_{it}+\beta_2 logifi_{it}+\beta_3 loginf_{it}+\beta_4 logop_{it}+\beta_5 crise_{it}+\beta_6 logrexch_{it}+\varepsilon_{it}$$

Where:

ε_{it} = error term.

4.0 DATA, ESTIMATION TECHNIQUE AND DISCUSSION OF THE RESULTS

1-DATA

This study examined the impact of the international financial integration, financial development and world financial crisis on economic growth in eight countries of West African Economic and Monetary Union (**Table 7**) from 1990 to 2020. The period 1990-2020 have been mainly considered because the financial liberalization started in developping countries from 1990. The data for the variables GDP, inflation and trade openness were obtained from the World Development Indicators (WDI) World Bank Data base ; the variables nominal exchange rate between USA dollars / franc-CFA, financial development index and international financial integration have been respectively collected from UNCTAD data base, International Monetary fund (IMF) and External Wealth of Nations Database. The variable world financial crisis is a dummy variable that take 1 during crisis period and 0 otherwise. The latter world financial crisis (2007-2009) that originate from USA was used to investigate the effect of world financial crisis on economic growth in the WAEMU region.

2-ESTIMATION TECHNIQUE

The fixed effect regression with Driscoll and Kraay (1998) standard errors estimator was used in this study. Driscoll-Kraay standard errors was appropriate since it controls for cross-sectional dependence, autocorrelation and heteroscedasticity which feature Fixed Effect and Random Effect estimators. The advantage of using Driscoll-Kraay standard errors in this study, is due to the fact that the cross-sectional dimension N is smaller than the panel's time dimension T because the estimator is based on large T asymptotics.

3-EMPIRICAL RESULTS AND DISCUSSIONS

a-Descriptives Statistics

Descriptive statistics such as mean, standared deviation as well as minimum and maximum values of the variables in their level form are presened in Table 1. This was done in order to understand the trends and the behaviour of the data of the variables that was used in this study.

Table 1 : Summary statistic of the variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Gdp	248	10352788373	10834296535	651345664.7	61033878289

Fd	248	0.0970173	0.0359046	0.0074525	0.2535942
Ifi	248	0.1724732	0.1857055	-0.0051237	1.141499
Inf	244	4.442834	10.09912	-7.796642	69.58363
Op	247	53.60915	14.2958	26.09894	112.761
Crise	248	0.0967742	0.2962479	0	1
Rexch	246	582.8554	267.6453	301.6404	3561.452

Source : Author Computation using Stata 15

The financial development index (fd) which measures the size and liquidity of financial institutions and markets is very low in the region, even less than 30%. This shows the underdevelopment of financial sectors which may impede significantly mobilization of resources for investment. While resources for investment is an important engine in promoting or enhancing economic growth in the region. The international financial integration (ifi) which is the sum of gross stocks of financial asset and liabilities as a percentage of GDP (Fatima, 2022), on average leveled at 17.25% with the peak over hundred percentage (114.15%) and the lowest around 17.25%. The real exchange rate (rexch) between USA dollars and franc CAF is introduced to capture the depreciation effect of the domestic currency on economic growth in the region. The lowest and highest level of the real exchange rate against USA dollars was respectivily 301.64 and 3561.45. The average amount during the study period was 582. 86 with 267.65% of variation. This may be a green light for these countries if they are exporter than importer while they have lower production capacity due to under developped infrastructure. The inflation (inf) averaged to 4.44% less than 5% from 1990 to 2020, the peak was 69.58%, almost 70% very significant. The variation was 10% and could be a source of economic growth undermining in the region, resulting from ineffective macroeconomic policies. The trade openness that is the sum of exports and imports of goods and services as percentage of GDP, was 53.60% on average during the study period, with a peak higher than hundred percentage (112.761%). This level of openness may be a benefit to the region when those countries under investigation dispose modern infrastructures to compete in market place with multinational firms.

b-Correlation Analysis

Correlation analysis is conducted to determine if the predictors are related with the outcome or the dependent variable. This is done by computing the correlation coefficient. It is also done among the predictors or the independent variables in order to determine if the variables

are correlated among themselves and in order to avoid the problem of multicollinearity. The results of correlation analysis are presented in Table 2.

Table 2 : Correlation Matrix

	Lgdp	Lfd	lifi	linf	lop	crise	lrexch
Lgdp	1						
Lfd	0.7024*	1					
Lifi	0.3095*	0.3501*	1				
Linf	-0.2996*	-0.4105*	-0.3561*	1			
Lop	0.0703	0.2020*	0.5745*	-0.0566	1		
Crise	0.0202	-0.0045	0.0623	0.0336	0.0404	1	
Lrexch	-0.2267*	-0.5137*	-0.0686	0.3642*	0.0243	-0.1976*	1

Decision : Absence of multicollinearity between the independent variables

***** equal 5% significante level

Source : Author Computation using Stata 15

The major concern in empirical study is when there is a higher relationship among the explanatory variables, it may lead to spurious regression. Therefore, the correlation test was at most important in view to avoid multicollinearity. From the results in **Table 2** it is evident that the issue of multicollinearity is not a problem since the highest correlation coeffcient among the independent variables is 0.5745.

c- Heteroscedasticity and autocorrelation test for panel data

Breusch-Pagan (1979) / Cook-Weisberg (1983) test for heteroscedasticity and Wooldridge (2002) test for autocorrelation in panel data were conducted in this study, and the results are presented in **Table 3**. The test statistics indicated no heteroskedasticity but the presence of autocorrelation in the errors structure.

Table 3 : Heteroscedasticity and autocorrelation test

Test Summary	Value	Prob
Breusch-Pagan / Cook-Weisberg test for heteroscedasticity	chi2(1) = 0.08	Prob > chi2 = 0.7745
Wooldridge test for autocorrelation	F(1, 7) = 521.816	Prob > F = 0.0000

in panel data		

d- Hausman test for Fixed or Random Effect selection

In order to determine whether fixed effect or random effect model is the appropriate estimation technique, hausman(1978) test was carried out and the results are presented in (**Table 4**). The hausman tests results favour fixed effect estimator because the p-value of the test is less than 5%.

Table 4: Output of Hausman test

Test Summary	Chi-Sq Statistic	Prob
Value	317.15	0.0000

d-Cross Sectional Dependence Test

Since we are using panel data, it is crucial that we check for the presence of cross sectional dependence among the units in the group. The cross sectional dependence test may permit to select the appropriate technique of estimation for the aforesaid study.

Table 5 : Pesaran (2004/2015) CD test results

Variables	CD-test	P-value	Average Joint T	Mean ρ	Mean abs (ρ)
Lgdp	27.904	0.000	31.00	0.95	0.95
Lfd	9.267	0.000	31.00	0.31	0.38
Lifi	23.204	0.000	30.75	0.79	0.79
Linf	14.8	0.000	20.71	0.62	0.62
Lop	6.278	0.000	30.75	0.21	0.32
Crise	29.462	0.000	31.00	1.00	1.00
Lrexch	18.186	0.000	30.50	0.62	0.81

Notes : Under the null hypothesis of cross-section independence, CD ~ N (0, 1).

P-value close to zero indicate that data are correlated accross panel groups.

Decision : Presence of cross-sectional dependence in variables accross panel unit in the group.

Source : Author Computation using Stata 15

From **Table 5**, we cannot reject the presence of cross-sectional dependence in variables accross panel unit in the group at 1% significance level. Pesaran (2004/2015) CD test results confirms the presence of cross-sectional dependence in our data. Since the data contain cross-section dependence, the ordinary least squares estimators are inefficient, so the appropriate estimator is Driscoll-Kraay standard errors, because it takes into account those weakness of previous technique to produce unbiased and efficient estimates.

g-Regression result

Regression results are presented in **Table 6**.

Table 6 : Empirical regression results

	Fixed-effects regression	Fixed-effects regression with Driscoll-Kraay standard errors
VARIABLES	lgdp	lgdp
lfd	0.0246	0.0246
	(0.0557)	(0.0769)
lifi	0.313***	0.313***
	(0.0202)	(0.0314)
linf	-0.0417***	-0.0417**
	(0.0120)	(0.0195)
lop	-0.0431	-0.0431
	(0.0908)	(0.0894)
crise	0.0826*	0.0826**
	(0.0444)	(0.0362)
lrexch	0.336***	0.336***
	(0.0669)	(0.0952)
Constant	21.41***	21.41***
	(0.538)	(0.471)

Observations	195	195
R-squared	0.728	0.728
Number of id	8	8

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The empirical regression results obtained using the Fixed-effects regression / Driscoll-Kraay standard errors estimation is presented in **Table 6**. The results reveal that, the international financial integration have a positive and significant effect on economic growth in the region while financial development have a positive and insignificant influence on economic growth in the countries under investigation. Contrary, inflation have a negative and statistically significant influence on economic growth in the region during the study period. The results shows that the effect is statistically significant for both international financial integration and inflation at 1% and 5% respectively. The study further reveals that domestic currency depreciation (dollar appreciation) and world financial crise have a positive and statistically significant impact on economic growth in the country under investigation. Whereas trade openness have a negative and insignicant effect on economic growth.

The positive effect of International financial integration is well supported in the reviewed literature and is in line with neoclassical theory. While the negative impact of inflation may due to low production capacity of domestic countries which translate demand and cost pull inflation to the region. Inflation is always seen as major disturbance that depreciated the value of a country's currency, harmed the competitiveness of companies and can force them to reduce their investment plans which may lead to low rate in economic growth.

The positive and insignificant effect of financial development on economic growth may due to under developped financial infrastructure or technology and deficiency in property right, regulation and surpervison in the region which impede the financial institutions and market indeed to fufill the financial functions namely saving mobilization, ressources allocation, corporate control, risk management and trading of goods and services (Levine, 1997). A country with a developped financial sector may favor the environment for credit demand, saving and transaction process and coud be an opportunity for investors to carry out their investment plan. Financial crisis has a positive sign on economic growth in the region. This means WAEMU' countries have displayed more resilient during crisis period which may due to weaked financial and economic linkage of these countries with the countries in crisis.

Trade openness have a negative influence on economic growth in the region, though insignicant. A possible explanation of the negative sign is Africa still have infrastructural problems, so the openness of WAEMU countries to the world may have adverse effect because it may be diffcult for the firms in developing countries to compete with international firms. While the depreciation of local currency has a positive and signicant impact on economic growth. This may favour the export sector which may lead domestic investors to increase the production capacity in view to meet foreign demand increase. Inversely, the local currency depreciation makes import goods expensive for the country consumers and may lead to decrease in imports. This will correct the trade imbalance and indirectly lead to economic growth.

Conclusion and Policy Recommandations

Most of the developing countries experience financial constraints which is reflected in their saving gap to fund their economic growth projects. So, they have seen in foreign capital flows as a means to overcome their saving-investment gap. While, financial crisis dries up funding around the world. Thus, this study examined the impact of international financial integration, financial development and financial crisis on economic growth in West African Economic & Monetary Union for the period 1990-2020. Using the Fixed-effects regression / Driscoll-Kraay standard errors approach, the study found a positive and significant effect of international financial integration on economic growth in the region against a negative and significant effect for inflation. While, local currency depreciation and financial crisis influence positively and statistically the economic growth in the region during the study period.

The trade openness impacts negatively the economic growth in the region. The variable international financial integration, financial development and local currency depreciation are the one that boost economic growth in the region. According to the results of this study, if WAEMU countries aspire to realise a faster and sustained economic growth rate, require to impliment policies that boost financial integration and development of the financial sector such as establishment and enforcement of legal and regulatory frameworks that protect savers and investors. Second, they suppose to develop the right technology adapted to local condition with view to support financial institutions creation and ensure that accounting and auditing are well developed to disclosure transparent and accurate financial informations. Thrird, it

become more important that macroeconomic fundametals are stable to sustainable economic growth in the region. Finally, financial institutions in turn, have to create desired instruments and products for savers and borrowers and develop management skills to improve portfolio quality to avoid losses.

Our conclusions differs from those of Barro and Bassolet [24] and Drama [25] who report negative influence of financial openness on the long-run economic growth in the region. This difference may due to the method and proxy of financial openness used in their study. However, Barro and Bassolet [24] study confirms well the positive and negative effect of financial development and inflation respectively.

While this study has evaluated the effect of international financial development, financial development and financial crisis on economic growth in WAEMU region, it is still imperative to determine and adress the factors that influence international financial integration and financial development in the region since financial crisis cannot be avoided completely like the recent banks crisis (SILVERGATE, SILICON VALLEY and SIGNATURE BANK) in USA which affected negatively the financial market in March, 2023.

Appendix

Table 7 : List of WAEMU Countries

N°	Countries
1	BENIN
2	BURKINA FASO
3	COTE d'IVOIRE
4	GUINEA BISSAU
5	MALI
6	NIGER
7	SENEGAL
8	TOGO

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