Regional Currency:

ASSESSING THE PROSPECTS OF WEST AFRICAN PROPOSED ECO IN THE PERIOD 2010 TO 2020.

A Study in Comparative Statistics.

A Dissertation Submitted to the Department of Economics of ST. Clement University, Turks and Caicos Islands, British West Indies, In Partial Fulfillment of requirement for the award of the

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APPROVAL PAGE

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DEDICATION

To my beloved wife and children, a dream fulfilled.

ACKNOWLEDGEMENTS

ABSTRACT

The word ECOWAS means the Economic Community of West African States, which is a regional body comprising of fifteen nations. The desire to integrate the region into one economic block that will lead to the circulation of a single currency has been in the agenda of various regional heads of states conferences, but it was discovered that colonial loyalty and the long existing monetary cooperation of Francophone nations with France was a strong impediment towards the realization of the objective. To solve this problem, it was agreed in a meeting held in Accra, Ghana in year 2000 that a two pronged approach will be adapted to fast track the realization of the objective. It was in this meeting that West African Monetary Zone (WAMZ) was created, which comprises mainly of Anglophone nations, in the hope that if a single currency can be achieved in this region, collapsing the two regions into a single currency zone will become easy and realizable. Initially, a target date of 2003 was chosen for the WAMZ region to actualize the goal of single currency. But the inability of the nations to fulfill the necessary conditions for such a union as spelt out in the primary and secondary convergence criteria necessitated a shift of date to 2005, 2009 and now 2015.This work sets out to examine the reasons behind the constant shifting of dates, the possibility of such a union and whether such possibility is achievable within a decade or beyond.

To be able to arrive at a reasonable conclusion, the author assumed that, the belief of modern commentators and writers on the economics of monetary unions which was based on the theory of (OCA) optimum currency areas was correct. Accordingly, the progress of the nations based on the primary convergence criteria was examined using students' t- tests of mean difference, Z tests of proportion and correlation/co variability analysis. Also, the strength of the economies of the participating nations was examined and compared with economies of European Union, Franco Phone West Africa and recently that of China. The result shows that the economic performance and strength of these nations is still poor, unstable and below average to sustain a free single currency, a result that agrees with the works of several modern commentators. The added discovery of correlation between corruption, poor economic performance and poverty, stands this present work out from its peers.

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

CHAPTER FIVE

SUMMARY OF FINDINGS AND DISCUSSION OF RESULTS.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

LIST OF TABLES

LIST OF FIGURES

LIST OF PICTURES

1. Pictures 4.1   EU Workers protesting against austerity

LIST OF WORDS

EBID	ECOWAS Bank for Investment and Development
ECOWAS	Economic Community of West African States
ECU	European Currency Unit
EEC	European Economic Community
EMCP	ECOWAS Monetary Cooperation Programme
EMS	European Monetary System
EMU	European Monetary Union
ERM	Exchange Rate Mechanism
EU	European Union
EU-II	EU Eleven Nations
IMF	International Monetary Fund
OCA	Optimum Currency Areas
OLS	Ordinary Least Square
VAR	Vector Auto regression
WAAMM	West African Agency for Monetary Management
WAEMU	West African Economic and Monetary Union.
WAMA	West African Monetary Agency
WAMI	West African Monetary Institute
WAMZ	West African Monetary Zone
WAMZ-5	WAMZ Five Nations
YUAN	Name of Chinese Currency

APPENDIX

Chapter 1

INTRODUCTION

1. 1 Back Ground of the Study.

Following the trend towards Globalization and the economies of scale derivable in largeness, many nations sharing common geographical location, language and culture have found it expedient to come together as a regional body, intent on cooperating with one another in the areas of currency, trade, security, free movement of citizens, culture and sporting exchanges.

In west African, one of such regional body was formed known as ECOWAS-the Economic community of west African States, by a treaty of May 1975 in Lagos Nigeria on behalf of fifteen nations- Benin, Burkina Faso, Cape Verde, Cote D'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo.

2. One of the primary purposes of coming together is to achieve the use of a common currency in the region as a basic integrating factor, facilitating both trade and free

movement of citizens. But several dates chosen for the realization of this objective has failed in the past and the latest being 2015 may not be realistic either.

This work will set out to examine the problems militating against this noble cause and also determine whether this problem is surmountable in future, or whether the idea of a common currency in the region is an exercise in futility.

1.2 Statement of the Problem

The history of quest for full monetary integration in West Africa is long and chequered. Starting with the establishment of West Africa Monetary Zone in the year 2000 by six heads of nations at Accra Ghana as a second monetary zone to complement the French speaking CFA zone. The hope is that in 2003 the two monetary zones will collapse into one to produce a single currency to be known, as the ECO.

Several institutions were set up to facilitate this objective like, the West Africa Monetary institute WAMI, the west Africa monetary Agency WAMA, the ECOWAS Monetary Cooperation programme EMCP, the West African Agency for Monetary

Management WAAMM, the West African Institute for monetary Management WIFMM, etc. In spite of these efforts, questions still arise as to

1. Why several dead lines were not met.

2. Why the entire institutions involved still sound positive in spite of several failures.

3. What does the actual fact on the ground support?

4. Shall the quest be encouraged or discouraged considering the cost implication to contributing Nations?

5. Can an independent currency be sustained or will it collapse over time.

6. Does the performance of European Union economies encourage future monetary unions?

7. Is the economic performance of CFA zone better than non CFA or Anglophone zone?

1.3 Objectives of the Research

The nations of West Africa numbering fifteen, belongs to a regional body called ECOWAS which was formed in the year 1975.

These nations are divided in their colonial economic loyalty to either France called the Francophone West Africa or Britain called the Anglophone West Africa, both being the erstwhile colonial masters.

Several efforts have been made to bridge this gap, thereby making the region an economic entity to realize the goal of a common regional currency. But the failure of several projected dates casts doubt as to the possibility of realizing the much expected monetary integration soon.

(1)   Already, Nine Nations, Benin, Burkina Faso, Cape Verde, Cote D'Ivoire, Guinea Bissau, Mali, Niger, Senegal, Togo are using a single currency, the CFA which is tied to the Euro via the French treasury.

The remaining nations of Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone have opted to form a second

monetary zone whose success will prepare the ground for future independent common currency in the region.

(2)   Since the attainment of ECOWAS common currency depends on the success of the second monetary zone experiment, this research is intended to answer questions arising from the activities in this zone.

1. Are the citizens aware of the move for such a union?

2. Can present and future macro-Economic performance support and sustain such a currency.

3. What does past adherence to the convergence criteria foretell for the future?

4. Is the industrial economy of the region strong, stable and elastic to manage asymmetric shocks?

5. Does present performance of existing economic unions encourage another union

6. How long can strong nations support weaker nations, without the standard of living of their citizens falling?

1.4 Research Methodology

The research will proceed with gathering of data which will come from established local and international institutions. Questionnaires will also be administered to students of Economics in selected Universities to test the popularity of this move in a particular representative country.

This information's when gathered, assembled and analyzed will help to answer the questions that were posed by the various research questions.

The researcher will approach the problem from three fronts

a) Ten years regional average data of performance according to the requirements of primary convergence criterion will be tested on regional strength basis and individual country performance basis. The outcome will reveal

   (i)   Whether the requirements for convergence has been Fulfilled

   (ii) If not, whether there is any progress towards fulfilling the convergence criterion.

(iii) And or whether such progress, if any, is steady or unpredictable

b) The next approach is to compare the performance of key economic sectors with that of

(i) European Union, who has so far maintained a single currency.

(ii) Chinese economy, being a nation that recently floated her currency, the Yuan.

c) Finally, the researcher will examine the viability of monetary unions by examining the

(i) The successes achieved by the European Union after more than ten years of EMU.

(ii) Comparing the economic status of francophone West Africa Economy who has enjoyed monetary union with France for more than forty five years with that of West African Monetary Zone, who is proposing the monetary union.

1.5 Methods of Data Analysis

Student's t- tests of mean difference, Z- tests of proportion and correlation coefficient, was employed in analyzing the collected data and testing posited hypothesis. Several comparative statistics in graphs, figures and tables, also formed the basis of conclusions and recommendations.

1.6 Research Questions and Hypothesis

The research questions are 11, out of which 1, 2,3,6,7, and 10 were posited as hypotheseis.

1. Does the regional mean average economic performance of WAMZ nations between 2000 to 2009 show closeness to the required regional bench mark

2. What is the status of current individual nations performance in comparism to the regional expectation

3. Does past performances show evidence of progress towards convergence

4. Is the progress towards convergence steady or intermittent

5. Is the awareness to form a union high among the WAMZ citizens

6. What was the status of public opinion before the commencement of European Monetary Union (EMU)

7. Did the EU member nations fulfill all the Maastricht convergence criteria before the commencement of EMU

8. Can WAMZ sustain a free and floating independent currency in both short and long run?

9. What was the status of Chinese Economy in year 2010, when it announced the floating of YUAN as compared to WAMZ regional economy?

10. Is poor economic performance related to corruption?

11. Does evidence show that monetary union is beneficial

1.7 Rational for the Research

Taking the European union as example of the regional body that have attained complete money and currency union, it is expected that evidence of benefits accruing from largeness will soon change the statistics of Europe to the envy of other interested, yet hesitant regions.

As a developing region, ECOWAS member nations stand to benefit in the same measure if such a union can be achieved.

This work will build on other such work before it to shade more light on the present condition of ECOWAS monetary union and seek to advise respective governments on the way forward or otherwise, the necessity of abandoning such a quest if it is considered in the light of existing evidence to be an exercise in futility.

1.8 Scope and Limitations

This work studied the possibilities of all ECOWAS regional currency which depends on the success of the second (WAMZ) monetary zone.

Most of the French speaking nations known as the WAEMU already belong to the CFA zone common currency tied currently to the Euro and managed by the French treasury.

The possibility of other nations in the region who do not belong to the CFA zone forming another independent monetary union which will facilitate the merging of the two zones formed the focus of this work.

The work assumed that CFA zone due to their past success as a monetary union is ready for expanded union in the region.

Emphasis was limited to the possibility of non CFA nations forming another union which will facilitate the merging of the two to a single and independent currency for the entire ECOWAS region. Again, the work assumed that examination of the performance of primary convergence criteria alone will provide enough background for an informed judgment on the success of the future union in accordance with the theory of optimum currency areas, while slightly extending the search by comparing the present status of WAMZ key economic sectors with that of European Union both before and after EMU and that of WAEMU being a close neighbor currently enjoying the status of a monetary union and also China, who recently floated her currency, the Yuan.

However, being a current topic, there is a limited availability of literature and test books on the subject and few regions that enjoy the status of monetary unions are still too young to provide enough period for effective statistical extrapolation.

Accordingly, the researcher draws much from available figures provided by international research organizations and official

figures from the home governments of the region under study in the belief that such figures are dependable.

Most figures are projections and estimates which are bound to differ with the actual figures and affect the outcome of this work; however this limitation may not affect the general conclusions of this work, which is that:

a. Economies of WAMZ nations are still underdeveloped in almost all sectors due to economic mismanagement of resources. Therefore an independent currency cannot be sustained till, perhaps another 30 years or beyond, i.e. if the governments and citizens decide to enforce internal discipline and prudence, a complete change of orientation and a democratic constitution. It is a human problem whose solution lies in the overhauling of human institutions.

b. The performance of EU and WAEMU, so far does not seem to encourage future monetary unions, unless such a union will extend beyond the economic to the political.

Chapter 2

Review of Literature

2.1 Introductions

It was believed that there are boundless economic benefits when nations or group of nations agree to come together and cooperate at various levels; one of such level of cooperation is monetary union, or currency union.

The elimination (Debrun: 2002) of national currencies and their replacement by a common regional currency continues to be a topical subject. It has inspired much research mainly in the European context, but other regions are now considering the advisability of such a project. The reasons behind such drive ranges from wanting to promote regional solidarity and integration to a fear that independent national currency may be subject to destabilizing speculations.

2.2 Historical Back ground

In the book, history of monetary union, chow (2003) traced the various past attempts at forming monetary unions when he

mentioned the works of Burns (1927) and meadows (1999) both being renowned authorities in early economic history.

In their works, mention was made of mytilene and phocae as early as fifth century B.C: and Achaean league of third century B.C. both being early European attempts at forming monetary unions.

Meadows (1999) mentioned three types of such unions as top down, bottom up and consenting. From the days of Napoleon down to Roman Empire, all cities states under conquest were forced from the top to use the currency or metallic coins of the conquering state.

In modern time, nations from bottom agree to tie their currency to the dollar or Euro or mutually consent to float a new and independent currency.

2.3 Existing Monetary Unions

MEMBERS	CURRENCY NAME	YEAR EST.
Central African Union	**CFA Franc**	**1945**
Cameroon		
Central African Republic		
Chad		
Republic of the Congo		
Equatorial Guinea		
Gabon		

West African Union   **CFA franc**   **1945**
  Benin
  Burkina Faso
  Côte d'Ivoire
  Guinea-Bissau
  Mali
  Niger
  Senegal
  Togo

CFA franc Issued by Overseas Issuing Institute (France) French Polynesia   **1945**
  New Caledonia
  Wallis and Futuna

East Caribbean Union OECS   **Dollar**   **1965**
  Antigua and Barbuda
  Dominica
  Grenada
  Montserrat
  Saint Kitts and Nevis
  Saint Lucia
  Saint Vincent and the Grenadines

European Monetary Union   **Euro**   **1999/2002**
  Austria
  Blgium
  Cyprus
  Finland
  France
  Germany
  Greece
  Ireland
  Italy
  Luxembourg
  Malta
  Netherlands
  Portugal
  Slovakia

Slovenia
Spain

Australian Union   **Australian Dollar**   1966
Australia
 Ashmore and Cartier Islands
 Australian Antarctic Territory
 Christmas Island
 Cocos (Keeling) Islands
 Coral Sea Islands
 Heard Island and McDonald Islands
 Norfolk Island

New Zealand Union   **New Zealand Dollar**   1967
 Cook Islands (New Zealand)
 Niue (New Zealand)
 Pitcairn Islands (UK)
 Ross Dependency (New Zealand)
 Tokelau (New Zealand) 1967

South African Monetary Area   **South Africa Rand**   1974
 Swaziland
 Lesotho
 Namibia

United States Union   **Dollar**
Puerto Rico
 Northern Mariana Islands
 U.S. Virgin Islands
 American Samoa
 Guam
 United States of America
 United States Minor Outlying Islands

2.4 Planned Monetary Unions

REGION/NATIONS	TARGET DATE	CURRENCY
Gulf Cooperation Council	2013	Khaleeji

East African Econo Commty	2015	Shilling
Caribbean Single Market	2015	Latino
America/Caribbean		
Southern African Deve Comm.	2016	Rand
South Asian Association	2016	S/Asia
Union of South American Nations		
Latin America/Caribbean	2019	
West African Monetary Zone	2020	Eco
WAMZ		
Common Market for Eastern and Southern Africa	2025	
African Economic Community	2028	

2.5 Meaning and Definition

Rendering a brief history of European Union, Stauffer (2009) stated that among the European states, EMU officially stands for Economic and monetary union. Other countries also use EMU to refer generally to the European monetary union. EMU is the agreement among the participating member states of the European Union to adopt a single hard currency and monetary system. The European council agreed that this single European market were essential to the implementation of the European Union, which was created to advance economic and social unity among the peoples of Europe and to propel Europe to greater prominence in the international community.

In 1979, the European Council adopted the European monetary system, known as EMS, which employed an exchange rate mechanism, or ERM, to encourage participating countries to keep the fluctuations of their currency exchange rates within an acceptable band. The permissible limits of the ERM were derived from the European currency unit, or ECU, a referential currency calculated from an average of the participating countries' national currencies. In 1988, Jacques Delors, the then president of the European commission, chaired a committee which proposed a three-stage plan to reach full economic union, including the establishment of a European Central Bank and a single currency which would replace any existing national currencies. With each stage, the monetary policies of the participating countries would become more closely entwined, culminating in full convergence in the EMU.

Plans for the EMU were formalized in provisions within the Maastricht Treaty, which founded the European Union. The Maastricht Treaty was signed in 1992, and subsequently ratified by all the member states. Some countries approved the Treaty

by a public vote, while other countries ratified the treaty through a legislative vote. The Treaty set up conditions, convergence criteria, which each member state in the European Union must meet before it could join the EMU. These conditions for EMU membership were considered necessary because when the member states join the EMU, domestic economic crises in one member state will affect all the other member states. To participate in the initial formation of the EMU, each member state had to meet the following five convergence criteria by 1998: (1) the national legislation governing the country's financial system had to be compatible with the treaty provision controlling the European system of Central Banks; (2) the country had to achieve a rate of inflation within 1.5% of the rates in the three participating countries with the lowest rates; (3) the country had to reduce its government deficits to below 3% of its gross national product; (4) the country had to keep its currency exchange rates with the limits defined by the ERM for at least two years; and (5) the country had to keep its interest rates

within 2% of the rates in the three participating countries with the lowest rates.

The west African monetary institute (WAMI) defined monetary union as an integral component of economic integration and evolutionary process that culminates in the adoption of a common monetary policy by a number of counties ceding sovereignty on monetary matters to a common monetary authority responsible for issuing a common currency.

This definition stated that monetary integration may evolve through a number of cooperation arrangements like.

(a)   An exchange rate arrangement where limited currency convertibility exists to

(b)   A parallel currency union where national currency co-exists with a common currency.

(c)   And a full monetary union where a common central bank exist to formulate and implement a common monetary policy and issue a single currency.

According to Bergin (2009) when economists such as Mundell, were theorizing about optimal unions in the middle of the

twentieth century, most people regarded the exercise largely as hypothetical. But since many European countries established a monetary union at the end of the century, the theory of monetary unions has become much more relevant to many more people.

The ability to issue money usable for transactions is a power usually reserved for a country's central government, and it is often seen as part of a nation's sovereignty.

Monetary union, also known as currency union or common currency involves multiple countries ceding control over the supply of money to a common authority

A monetary union in many ways resembles a fixed – exchange rate regime, where countries retain distinct national currencies but agree to adjust the relative supply to maintain a desired rate of exchange. A monetary union is an extreme case of fixed – exchange rate regime, with at least two distinctions. First, because they switch to a new currency, the cost of abandoning the new system is much high for a typical fixed – exchange rate regime, giving people more confidence that the system will last.

Second, a monetary union eliminates the transactions costs incurred when the need to exchange currencies in carrying out international transactions arises.

2.6 The Economic Community of West Africa States (ECOWAS)

The Economic community of West Africa states (ECOWAS) was established on May 28, 1975. sixteen (16) countries, namely, Benin, Burkina Faso, Cope Verde, Cote d' Ivoire, The Gambia, Liberia, Guinea Bissau, Guinea, Ghana, Mail, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo singed the ECOWAS charter. Following the withdrawal of Mauritania in December 2000, membership dropped to fifteen. The major objectives of ECOWAS are to establish a common market and create a monetary union. Another Mission is to promote economic integration in all fields of economic activity particularly industry, transport, energy, telecommunications, agriculture, natural resources, commerce, monetary and financial questions, social and cultural matters.

ECOWAS as an economic and monetary union seeks to provide wider market for goods and services, encourage free movement

of people, create employment, establish free trade zones with common tariff structure, allow for maximum allocation of resources and invariably reduce price of goods.

ECOWAS has the following institutions: the Authority of State and Government, the Council of Ministers, the community parliament, the Economic and social Council, the Community Court of Justice, the Executive secretariat and the ECOWAS Bank for investment and Development (EBID). The Authority of Heads of State and Government of member states is the supreme institution of the Community and are composed of Heads of States and or Governments of Member States. The Authority is responsible for the general direction and control of the Community and takes all measures to ensure its progressive development and the realization of its objectives. The Executive Secretariat which carries out most of the functions of ECOWAS is located in Abuja, Nigeria.

2.7 Appraising Optimum Currency Areas Theory

Traditional OCA theory believes that countries exposed to similar symmetric shocks and business cycles, or possessing mechanisms for the absorption of similar asymmetric shocks may find it optimal to adopt a common currency. Much of this literature focuses on four inter- relationships between the members of a potential OCA. As observed by Frankel and Rose (1998) these are: the extent of trade; the similarity of the shocks and cycles; the degree of labor mobility; and the system of fiscal transfers (if any). The greater the linkages between the countries using any of the four criteria, the more suitable they are for a common currency. These have been encapsulated in a number of primary and secondary quantitative targets that intending members of WAMZ must comply with prior to the commencement of the project. They include: the attainment of single digit inflation that is less than 10 percent; a budget deficit (excluding grants) to GDP ratio that must be equal to or less than 4.0 percent; central bank financing of the budget deficit that should be equal to or less than 10 percent of previous year's tax

revenue and maintenance of external reserves to cover at least 6 months of imports. The targets for the secondary convergence criteria specified to compliment the primary ones are: that the level of domestic arrears should be equal to, or less than zero; tax revenue to GDP ratio must be equal to or greater than 20 percent; government wage bill to tax revenue ratio to be equal to or less than 35 percent; public sector investment to tax revenue ratio to be equal to or more than 20 percent; real interest rate to be greater than 0.0 percent, and lastly, the nominal exchange rate movement to be within the band of (+15 percent).

One of the conditionality for the commencement of WAMZ draws extensively from the convergence hypotheses which postulates that costs associated with unionization can be minimized if the differences in spatial distribution of income and opportunities between intending members at the international and national levels can be narrowed down or eliminated. Barro and Sala-i-Martin (2004) gave a two-fold definition of such convergence: firstly, they defined economic convergence as the narrowing of output gap between less developed and developed economies

which accompanies international trade. The neoclassical growth model describes this as absolute or conditional β convergence if the economies have similar tastes and technologies, thereby converging to the same or their own steady state. Benos & Karagianis (2008) notes that a second form of economic convergence occurs if the dispersion of the cross-sectional distribution of a variables such as per capita income (measured, for example, by its standard deviation across a group of countries/regions) declines over time (σ convergence). Although Corsetti (2008) acknowledges the desirability of economic heterogeneity (especially one generated by sustainable policy pursuits),he argues that such could be inconsequential if independent national policy pursuits interfere adversely with regional macroeconomic stabilization around desired growth path.

The observation, since the commencement of WAMZ in 2000 is that this primary convergence conditions has been the most difficult to fulfill. Not only has there been persistent divergence in output growth rates among these countries, the prospect for

attaining its convergence has also been weak thereby deeming commencement prospect for attaining its convergence. If progress is to be made towards convergence, there is therefore the need to understand what generates the differential growth path among these countries. In particular, there is the need to ascertain the role of nominal exchange rates volatility (appreciation/depreciation), under independent floating exchange rate regime as well as the independent monetary policy stance in stimulating growth in these countries.

Several studies examined regional income convergence and its determinants globally from a macroeconomic perspective. At the policy level, regional convergence has been an objective of most governments all over the world and particularly in Europe since its inception as the European Economic Union (EEC) in 1957. Proponents of the European common markets argued that lower regional inequality is necessary in order for European Monetary Union (EMU) to be successful. However, the international evidence is mixed. For example, Barro and Sala-i-Martin (1991) have documented convergence at an approximate annual rate of

2% in the US states/regions for 1880-1988 and 73 EU regions for 1950-1985. In a recent study they found very weak evidence to support the theoretical assertion that migration from poor to rich economies fosters convergence (Barro and Sala-i-Martin,2004). Furthermore, Chessire-Carbonaro (1995) reported mixed results for 122 urban EU regions. Recently, J.R Cuadrado-Roura (2001) found that after a period of regional convergence from 1960 to the mid -1970s, the process stopped and stabilized until 1996 in the EU regions.

 Several new empirical literatures also emerged on the subject of output supply shocks especially in the late 1980s and early 1990s when the debate on similarities of shocks—i.e. the extent by which partner countries intending to adopt a single currency endure symmetric versus asymmetric shocks—acquired great prominence. This was the result of advancements in econometric techniques pioneered by Blanchard and Quah (1989) and other authors. The main underlying argument posit that if the incidence of supply and demand shocks and the speed with which the economy adjusts – taking into consideration also the policy

responses to shocks - are similar across partner countries, then the need for policy autonomy is reduced and the net benefits from adopting a single currency might be higher. Hence, the similarity of shocks, and policy responses to shocks was perceived as a "catch all" property capturing the interaction between several OCA properties (Masson and Pattillo, 2004).

Among the studies that examined the incidences of supply shocks are: Blanchard and Quah (1989), Bayoumi and Eichengreen(1992, and 1993). These studies estimate vector auto-regressions for output and prices; restricting demand disturbances to effects on only prices and output. In particular, they find positive correlations between the fundamental shocks in Austria, Germany, Denmark, France, the Benelux countries and Switzerland, while the correlation between these countries and the southern countries is weaker.

At the continental level, Buigut, and Valev (2004) estimated a two variable VAR model to identify supply and demand shocks for East African countries in order to determine if they are good candidates for a monetary union. Their analysis shows that

contemporaneous shocks among the EA counties are mostly asymmetric with the exception of Kenya and Burundi that was positive and significantly correlated.

At the ECOWAS regional level, Fielding and Shields (2001) estimated an output and price shocks for CFA franc countries using a 4-variable (output growth, inflation, money growth and foreign inflation) VAR model to confirm a high degree of correlation between inflation shocks across countries. Fielding and Shields (2003) extended this study to WAMZ using a 3 – variable (output growth, real exchange rate and money growth) VAR model and the terms of trade as an exogenous variable. The results suggest less real exchange rate volatilities for WAMZ countries and negative output shocks correlation, although the latter result is not significant. Houssa and Leuven (2004) analyzed the costs of a monetary union in West Africa by means of asymmetric aggregate demand and aggregate supply shocks but departed from previous studies that estimated the shocks with the VAR model. Instead, they discussed the limitations of the VAR model approach and apply a new technique based on the

dynamic factor model. The results suggest the presence of economic costs for a monetary union in West Africa because aggregate supply shocks are poorly correlated or asymmetric across these countries. Although their studies also show that aggregate demand shocks are correlated between West African countries, their analysis also returned a verdict that it would not be an optimal policy choice to commence a monetary union for the region.

Also, Masson and Pattillo (2004) applied an "Augmented OCA Model with Fiscal Distortions" to evaluate the feasibility of a monetary union for Africa. It is based on the optimum currency areas literature, which focuses on asymmetries of shocks, but further identifies another important asymmetry: fiscal distortions, under the assumption that the regional central bank is assumed not to be fully independent, but sets monetary policy to reflect average conditions (including fiscal deficits) in the region. As a result, countries that were very different with respect to fiscal distortion would be unattractive partners for a monetary union, because the central bank would produce undesirable outcomes

for one or both of them. In this particular study, Nigeria was identified as an unattractive partner for the WAMZ monetary union, while suggesting selective accession to existing monetary union by intending members of this union to the WAEMU.

The major criticisms of the shocking studies are that the test results are ambiguous (Tavias, 1994), and often in conflict (with no concurrence on its theoretical underpinning, e.g., on the relationship between exchange rate variability, trade and investment); De Grauw (1990) observed the difficulty in constructing measures of future shocks. Mongelli (2002) noted that the shocking measures does not take into account the Lucas critique and the changes in structures due to changes in policy regimes, such as a "disciplining effect" on policy-makers as well as the effects of market liberalization. These studies also lead to the drawing of narrower borders for monetary integration, i.e., the "core group," than other type of studies. Due to the need for relatively long time series for econometric tests, these studies cannot reflect a progress under some properties, such as a

change in policy preferences accompanying a fall in inflation differentials, in the more recent part of the sample period.

A recent study by Corsetti (2008), therefore suggest a reconsideration of output shocks criteria from the perspective of new Keynesians monetary theory that indeed, output shocks divergence under inefficient independent monetary policy should actually signal the need for putting in place an overriding supra-national monetary policy controls that can remove the autonomy from national monetary authorities. He acknowledges the desirability of economic heterogeneity (especially one generated by sustainable policy pursuits), and argues that such could be inconsequential if independent national policy pursuits interfere adversely with regional macroeconomic stabilization around desired growth path.

2.8 Development of Thought In ECOWAS Monetary Union

In an article published by ThisDay newspaper, Juliana Taiwo and Dele Ogbodo (23 June, 2009) reported that of the fifteen nations that make up ECOWAS, five belongs to WAMZ or West African Monetary Zone, while the rest belongs to the WAEMU or West

African Economic and Monetary Union- mostly francophone nations using a common currency (CFA) that dates back to 1960s.

According to the article date lined Abuja, the authority of heads of states of WAMZ nations in their 24th meeting of the convergence council of ministers in Abuja said that December, 2009 was no longer feasible for the take-off of its single currency and monetary union within the region.

Under the revised plan, WAMZ expects to launch the currency named "ECO" by 2015, while the entire ECOWAS will adopt a single currency by 2020 with the establishment of an ECOWAS Central Bank. In the light of such several postponements since the idea of regional currency was mooted in year 2000, Balogun (2008) wrote that WAMZ feasibility has been guided by both "shocking" studies criteria (Ojo 2005; Nnanna 2007) which insists on ex-ante approach of macroeconomic policy convergence which will lead to similarity of shocks and a minimization of the costs of unionization (Mundell 1961, Kenen 1969) as a precondition for

the optimal operation of the OCA or optimal currency areas, ex-post. But the verdict of several such reports by West African Monetary Institute (WAMI) suggested several postponements for the commencement of WAMZ.

A few other studies using Vector Auto regression VAR models to analyse incidence of asymmetric shocks in West Africa according to the standard pattern and techniques applied in advanced economies as pioneered by Blanchard and Quah (1989) and Boyoumi and Eichengreen (1992). Among them also are Fielding, and Shields (2001, 2003), Houssa and Luven (2004), Ogunkola (2005), and Masson and Patillo (2004), who based their studies on the optimum currency areas literature which was focused on the asymmetries of shocks and a synchronization of fiscal policies in the region, concluded that countries with different fiscal distortions are unattractive partners for monetary union, especially when Nigeria's disproportionate fiscal distortion is considered. These studies suggested instead, a selective gradual accession to existing union - the WAEMU, while totally cancelling the idea of independent free currency.

It must be noted that the same conclusion of non-viability was applicable to the European case, yet they went on to form the EMU in defiance. However, new studies based on trade ties rather than policy convergence and pioneered by Frankel and Rose (1989), Corsetti and Pissenti (2005, 2008), Debrun, Masson and Patillo (2003), Anyanwu (2003), shows that membership of a currency union irrespective of macro-economic policy disparity, can boost intra-regional trade and central banks credibility, which could act as an instrument of macroeconomic convergence ex-post, thus fulfilling the ultimate requirements of OCA via the back door.

## 2.9 Cost and Benefit Analysis of Monetary Unions

The preliminary aspect of analyzing the costs and benefits of monetary union will be based on the work of mundell (1961) Mackinuon (1963) and Kohnen (1969), major proponents of the theory of optimum currency area.

From the outset, it must be noted that in a momentary union, individual rations forgo the power to control their momentary and fiscal policies to a neutral central bank.

Initially let us present a simplified model based on two nations called Nigeria and Ghana who have agreed to form a momentary union by abandoning their national currencies naira and cedi to adopt a common currency called the Eco, which is managed by a common central bank.

According to Mundell, if for some reason consumers shift their demand preferences away from Ghana made goods in favor of Nigeria made goods. The effect of this asymmetric (unequal) shock in both nations is explained below.

Fig 2.1 Aggregate d & S in Ghana and Nigeria
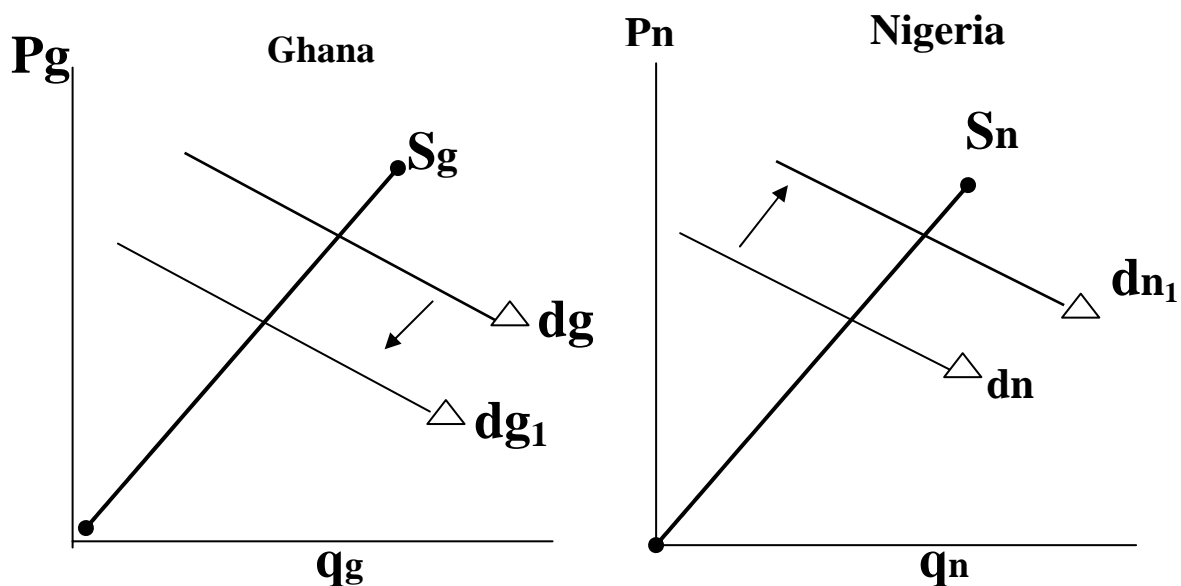
The shift in demand will push dawn output in Ghana and increase same in Nigeria.

As Nigeria faces boom in output, and high prices and employment, Ghana will be confronted with a low demand, low output and high unemployment.

Immediately, two mechanism of automatic adjustment will swing into action.

a) Wage flexibility

But if wages in both countries are flexible, more unemployed workers in Ghana will mean reduced wage bill in Ghana, shifting aggregate demand curve down wards, but in Nigeria increasing wage bill will shift total demand curve upward tending to bring back equilibrium.

Fig 2.2 The automatic adjusting process.
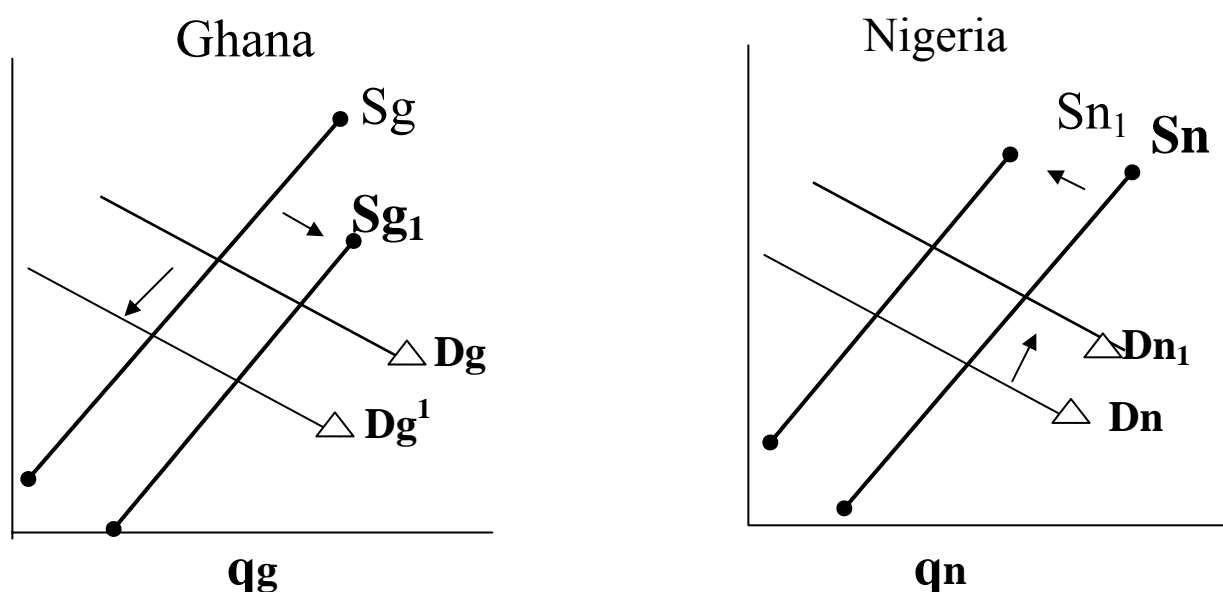
b) Labour Mobility

If there is perfect labour mobility, the unemployed labour in Ghana will move to Nigeria where there is demand for labour. This will help to obviate the inevitability of cost of labour facility falling in Ghana and prices rising in Nigeria thereby forestalling an imminent unemployment and inflation problem in both countries.

Therefore Mundell (1961) concludes that monetary unions between nations are encouraged if there is sufficient wage flexibility and sufficient mobility of labuor.

But in practice wages tends to be only flexible in the upwards direction and social and cultural values in Africa hampers labour mobility. In the absence of an adjustment mechanism, Ghana will suffer unemployment problem while the pressure of demand will push up prices in Nigeria causing inflation.

As separate nations, both can use interest rate and exchange rate policy and attempt to re-establish internal equilibrium.

Therefore, the major problem of currency union is the loss of sovereignty and the freedom to decide how to solve her internal and external problems without consultation.

Again, it was argued that given the rampant corruption among the leadership of developing nations and the inefficiency of democratic institutions and principles to instill discipline and control in polices and governance, the establishment of reference bench marks to which a group must adhere to, and then ceding of power to control monetary policy to an independent institution can be a source of forced discipline. Commenting further on the benefits of monetary union, a publication of the federal reserve bank of New York mentioned the following points.

1. A reduction in the cost of international transaction by eliminating cost of hedging and Exchange rate fluctuation,

2. Reduction in cost lowers price of commodities which stimulates demand and expansion.

3. Increase in demand promotes competition leading to improved quality and quantity.

4. Larger market, economy of scale and competition, all will stimulate income, Employment and improve standard of living,

5. Price, interest rate and exchange rate will all be more stable lending certainty to business calculations.

However, the outcome of this work will shed more light on the truth behind these anticipated benefits.

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Chapter 3

Research Design and Methodology

3.1 Introduction

The third chapter of this work will concentrate on the methodology of this study.

The purpose of research is to discover answers to questions through the application of scientific procedures.

These procedures shall be discussed to help the reader appreciate the work and for better understanding.

While chapter two examined related literatures, chapter three shall dwell on

3.2 Research Methodology Used

3.3 Sources of Data

3.4 Population of Study

3.4 Questionnaire Administration

3.5 Analysis Technique

3.2 Research Methodology Used

This research was both Historical and exploratory in approach which helped the researcher to evaluate the economic statistics

of past and present unions using simple parameters in order to make informed statements on future unions for the betterment of society.

It also enabled the researcher to access current trend of taught on the topic and also tested the level of public awareness.

The results obtained via this approach is better, because it avoided the standard econometric shocking studies common in modern literature which has been swamped with scatting criticisms due to the problems of faulty interpretation. Although both approaches arrived at the same conclusion of non-viability due to poor correlation ship of convergence factors, this approach went further to isolate corruption as the major factor behind the poor performance, including problem of convergence in these economies, nothing that EU was formed despite the same report of non-viability but low level of corruption has helped them to survive. The warning is that if WAMZ toe the same line without considerably reducing the level of corruption, such a union will not survive.

3.3 Sources of Data

This work, being historical, relied more on secondary sources of data, although in the quest to gauge public awareness, primary data through the questionnaire method was used to gauge current public awareness.

The collection of data through either source was strictly in conformity with the research questions / hypothesis stated in chapter one of this work.

i) Primary Data

The source of primary data was the response to a questionnaire on the awareness of the public to an intended monetary union by five West African nations.

The questionnaire was designed to be administered in two stages.

Stage one was a single yes or no question intended to know the degree of awareness of the expected union among the informed citizens who by their education and discipline supposed to be the first line of citizens to know and appreciate the topic of study.

The second stage was multiple questions which will be administered to the rest of the population only if the result of awareness in the first stage was high which will encourage the second stage of the questionnaire, if the awareness is low, there will be no need to administer the second questionnaire. In this study the second questionnaire was not administered.

ii) Secondary Sources

The secondary sources dwelt mostly on comparative time series data on various economic variables supplied by reputable local and international agencies like the IMF, World Bank, Eurostat, ADP, UNDP, UNESCO, TI, CIA World Fact Book, WAMI, ECOWAS, CNN, BBC, CCTV, Wikipedia Free library, Books, Periodicals, and Magazines etc.

3.4 Selection of Population

Although the scope of this research covers five west African countries, the opinion awareness test was limited to Nigeria, partly because this country is looked upon to provide both leadership and pivotal role in the future union and as such the country should also provide the same leadership role in public awareness.

Also the cost implication of covering the entire region is enormous making it necessary to apply the outcome of Nigerian experiment as a fair representation of the whole.

The first stage questionnaire was administered to Graduate Students of the Department of Economics and Finance in five Nigerian Federal Universities as follows

1. University of Nigeria Nsukka   20

2. University of Lagos   20

3. University of Ibadan   20

4. University of Port Harcourt   20

5. Ahmadu Bello University, Zaria   20

Total   **100**

Five respondents out of hundred failed to respond, but returned the questionnaire mutilated or reported it misplaced, thus making 95 the effective sample size used for the analysis

3.5 Data Analysis Technique

The following methods was used to analyse collected data

a) The Research Hypotheses

   The research hypotheses was tested using three types of test statistic, Students t-test of mean difference, Correlation analysis and Z- test of proportion of success.

b) The Rest of Research Questions

   The rest of research questions was analyzed using, Graphs, Tables, Figures, Comparative Averages, Simple Percentages and Ratios.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 The Introduction

Data in itself does not convey any significant meaning or information unless it is subjected to statistical applications and analysis. In this chapter attempt will be made to analyze the information collected through both primary and secondary sources.

The analysis would be carried out using tables, graphic illustrations, Z and t tests, and Correlation analysis for testing the posited hypothesis.

The ten year statuses of convergence data for nations comprising the WAMZ for years 2000-2009 are shown below. It will be the basis to answer most of the research questions posed in

Chapter 1

4.2 Tabular Presentation and Analysis

Table 4.1 shows the performances of Gambia, Ghana, Guinea, Nigeria, and Sierra Leone, all WAMZ nations with regards to the primary convergence criteria (a) single digit inflation rate, (2) fiscal deficit as percentage GDP (Excluding Grants) within 4%.

(3) Central bank financing of fiscal deficit within 10% (4) And gross External reserves, not less than 6 months of imports.

The table below shows 10 years figures from each country for each criterion and their average, based on the latest figures from (WAMI) the West African monetary institute.

Table 4.1 Status of convergence performance for ten years 2000 to 2009

Status Of Convergence Primary Criteria	COUNTRY- GAMBIA											
Criteria	Target	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Inflation Rate	≤10	0.9	8.1	13.0	17.6	8.0	1.8	0.4	6.0	6.8	6.4	**6.90**
fiscal Deficit GDP(%) excl. grants	≤4	3.5	10.0	-9.0	-7.6	-8.6	-7.4	-2.7	-1.0	-3.3	-1.4	**5.46**
central Bank Financing of Fiscal Deficit	≤10	0	80.7	22.4	63.1	0.0	0.0	0.0	0.0	0.0	0.0	**16.67**
gross External Reserves (Months of Imports)	6	7	8.2	5.2	4.6	5.0	5.2	4.9	5.5	5.6	6.0	**4.61**
Number of Criteria Satisfied		4	2	0	0	2	2	3	3	3	4	

Status Of Convergence		COUNTRY-GHANA										
	Target	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	**Average**
Inflation Rate	10	40.5	21.3	15.2	23.6	11.8	13.9	10.9	12.8	8.1	9.2	**16.73**
fiscal Deficit GDP(%) excl. grants	4	10.7	13.2	8.3	7.5	8.1	6.9	11.5	14.7	18.6	15.3	**19.48**
central Bank Financing of Fiscal Deficit	10	57.9	0.0	12.1	0.0	0.0	0.0	0.0	14.8	38.9	22.1	**14.56**
gross External Reserves (Months of Imports)	6	1.0	1.4	2.7	5.0	4.6	4.0	3.8	3.9	2.2	3.4	**3.2**
number of Criteria Satisfied		0	1	0	1	1	1	1	0	0	1	

Status Of Convergence		COUNTRY-GUINEA										
	Target	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	**Average**
Inflation Rate	10	7.2	1.1	6.1	14.8	27.6	29.7	30.1	12.9	13.5	13.1	**16.5**
fiscal Deficit GDP(%) excl. grants	4	-6.4	-5.2	-8.1	-11.1	-6.5	-0.9	-0.2	-0.5	-1.7	-0.9	**-4.15**
central Bank Financing of Fiscal Deficit	10	17.6	0.0	27.1	16.1	23.1	0.0	81.6	0.0	5.4	4.4	**17.53**
gross External Reserves (Months of Imports)	6	2.1	4.4	3.7	1.7	1.0	1.1	0.6	0.4	0.6	0.5	**1.61**
number of Criteria Satisfied		1	2	1	0	0	2	1	2	1	2	

Status Of Convergence		COUNTRY-NIGERIA										
Criteria	Target	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Inflation Rate	10	6.9	16.5	12.2	23.8	10.0	11.6	8.6	6.6	15.1	16.1	13.50
fiscal Deficit GDP (%) excl. grants	4	14.5	-5.2	3.9	2.0	1.2	1.3	0.6	-0.5	-0.2	-0.1	1.62
central Bank Financing of Fiscal Deficit	10	0	0.0	0	37.6	0	0.0	0.0	0.0	0	0	3.76
gross External Reserves (Months of Imports)	6	12.9	8.9	6.2	4.9	11.6	16.1	14.5	13.2	13.8	14.3	11.19
number of Criteria Satisfied		2	3	3	1	3	3	4	4	1	3	
Status Of Convergence		COUNTRY-SIERRA LEONE										
	Target	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average
Inflation Rate	10	-2.8	3.4	-3.1	11.3	14.4	13.1	8.3	12.2	13.3	14.1	9.59
fiscal Deficit GDP(%) excl. grants	4	17.3	-16.5	-11.7	-10.0	-8.6	-9.6	-8.5	-0.5	-7.9	-6.8	10.19
central Bank Financing of Fiscal Deficit	10	0	0.0	-5.8	24.3	-32.0	-19.6	-7.19	1.3	0.3	0	10.12
gross External Reserves (Months of Imports)	6	2.8	2.4	2.7	1.7	3.8	4.0	4.2	4.8	4.3	4.6	3.53

| number of Criteria Satisfied | | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | 2 |

Table 4.2 shows the average performance of each country and the regional 10 years average performance as derived from Table 4.1

Table 4.2 Convergence Criteria Country and Regional 10 years average Performance

Country	Inflation	Fiscal deficit/GOP	Financing Deficit	Gross Reserve
Gambia	6.91	5.46	16.62	4.61
Guinea	16.53	4.52	17.53	1.61
Ghana	16.73	11.48	14.56	3.21
Nigeria	13.52	1.61	3.76	11.19
Sierra Leone	9.59	10.19	10.12	3.53
Total	63.28	33.26	62.59	24.15
Regional 10 years Average	**12.66**	**6.65**	**12.52**	**4.83**
Regional Reference Figures	**10**	**4**	**10**	**6 months'**

Source: WAMI-imao, 2009

4.3 Testing Hypothesis

The hypothesis being tested is called Null hypothesis denoted by H_o while the alternative hypothesis is H_1. The decision rule will be

a) If the computed value is greater than the critical table value (at 0.05) the Null hypothesis is rejected.

b) But if the computed value is less than the critical table value (at 0.05) the alternative hypothesis is accepted.

Research Question 1

Is the mean regional average performance for 10 years equal with the mean bench mark.

H_o: The mean regional **average** performance for 10 years is not equal with that of the mean bench mark

H_1: The regional mean performance for 10 years is equal with the bench mark

To test this hypothesis, the mean regional average performance of Table 4.2 is compared with the target criteria using t- test of mean difference.

Let observed figures be represented by X_1 and expected figures by X_2 as follows:

X_1	X_2
12.66	10.00
6.65	4.00
12.52	10.00
4.83	6.00

Where X_1 is the regional average and X_2 is the reference bench mark.

To determine if there is a significant difference between the regional mean performance and the reference mean, we will use student t – distribution to test for a significant difference between the two mean as independent samples by proposing the Hypothesis below.

H_0: $\overline{X}_1 - \overline{X}_2 = 0$

H_1: $\overline{X}_1 - \overline{X}_2 \neq 0$

Using the formula

$$t = \frac{\overline{X}_1 - \overline{X}_2}{S} = \frac{n_1 \, n_2}{\sqrt{n_1 + n_2}}$$

X_1	X_2	$(X_1 - \overline{X}_1)^2$	$(x_2 - \overline{x}_2)^2$
12.66	10.00	12.18	6.25
6.65	4.00	6.35	12.25
12.52	10.00	11.22	6.25
4.83	6.00	18.84	2.25
36.66	30.00	48.59	27.00

$\overline{X}_1 = 9.17 \qquad \overline{X}_2 = 7.5 \qquad n_1 = 4, \quad n_2 = 4$

$$S = \sqrt{\frac{\Sigma(\overline{X}_1 - \overline{X}_1)^2 \quad \Sigma(\overline{X}_2 - \overline{X}_2)^2}{n_1 + n_2 - 2}} = \frac{75.59}{6} = 12.60$$

$$t = \frac{1.67}{12.6} \sqrt{\frac{816}{8}} =$$

$$t = 0.13 \times 1.4 = \underline{\underline{0.18}}$$

Which is less than the table value $(t_{0.05})$ at $v = 6$ degrees of freedom.

The null hypothesis is accepted, the mean value of X_1 differs from that of X_2

The implication is that based on the **average** performance of the five nations after 10 years, the figures of the 4 primary

criteria still differ significantly with the regional reference bench mark.

Research Question 2

Does individual nation's performance so far differ from the regional target.

H_0: Individual nation's performance is not significantly different from the regional target.

H_1: Individual nation's performance is significantly different from the regional target

To answer this question we refer to the table 4.3 below

Table 4.3 Individual nations Performance Rating 2000 - 2009

	2000 - 2009				
Criteria Country	Inflation Rate	Fiscal Deficit	Central Bank financing	Gross Reserves	Total Per Nation
Gambia	-2+8	-5+5	-3+7	-7+3	**-17+23**
Ghana	-8+2	-10+0	-5+5	-10+0	**-33+7**
Guinea	-7+3	-5+5	-5+5	-10+0	**-27+23**
Nigeria	-8+2	-0+10	-1+9	-1+9	**-10+30**

Siera Leone	-6+4	-10+0	-4+6	-10+0	**-30+10**
Total	**-31+19**	**-30+20**	**-18+32**	**-38+12**	**-117+83**

2000 to 2009			
	Criteria Met	Criterion (Not) Met	Target
Gambia	23	17	40
Ghana	7	33	40
guinea	13	27	40
Nigeria	30	10	40
Siler Leone	10	30	40
total	83	117	200

If a particular nation fulfills all the primary criteria for 10 years, it will score positive (+10) points. If the criteria are not fulfilled for a particular year, it will be represented by a negative (-) point such that both always add up to 10 points, signs disregarded.

Our hypothesis is Ho: $\overline{X}_1$ = $\overline{X}_2$ ($t_{0.05}$)

H1: $\overline{X}_1 \neq \overline{X}_2$ ($t_{0.05}$)   (Applying t test)

$$t = \frac{\overline{X}_1 - \overline{X}_2}{S} \sqrt{\frac{n_1\, n_2}{n_1 + n_2}}$$

Where X_1 = Total 10 years maximum score (equals 40) points

X_2 = Total actual score for 10 years

X_1	X_2	$X_1 - \overline{X}_1$	$(X_1 - \overline{X}_1)^2$	$X_2 - \overline{X}_2$	$(X_2 - \overline{X}_2)^2$
40	23	0	0	6.4	40.96
40	7	0	0	-9.6	92.16
40	13	0	0	-3.6	12.96
40	30	0	0	13.4	179.56
40	10	0	0	6.6	43.56
40	16.6	0	0		369.20

$\Sigma X_1 = 200$, $\overline{X}_1 = 40$

$\Sigma X_2 = 83$, $\overline{X}_2 = 16.6$, $n_1 = 5$, $n_2 = 5$

$$S = \sqrt{\frac{(X_1 - \overline{X}_1)^2 + (X - \overline{X})^2}{n_1 + n_2 - 2}} = \sqrt{\frac{0 + 369.2}{5 + 5 - 2}} = \sqrt{\frac{369.2}{8}} \text{ or } 6.79$$

$$t = \frac{40 - 16.6}{6.79} \sqrt{\frac{5 \times 5}{5 + 5}} = 3.4 \sqrt{\frac{25}{10}} \text{ or } 5.38$$

$v = n_1 + n_2 - 2 = 8$, $v = 8$, $t_{0.05} = 2.31$

The calculated value is more than the table value; we discard H_0 and uphold H_1. There is a significant difference between the regional target and the actual performance of various WANZ nations.

Research Question 3

Do past economic performances of WAMZ nations show a tendency towards economic convergence?

H_0 Past performance shows a tendency towards economic convergence

H_1: Past performance show no evidence of macro-economic convergence

Using official figures from WAMI for ten years, one can calculate the regional mean performance for the first five years (2000 – 2004) and compare it with the mean of the last five years (2005-2009)

If the difference in decreasing overtime, it proves evidence of convergence.

Table 4.4 COUNTRIES FIVE YEARLY AVERAGE

(2000 – 2004 and 2005-2009)

Criteria	Gambia	Ghana	Guinea	Nigeria	Sierra Leone	Regional Aver
Inflation	9.52	22.50	11.36	15.40	7.00	**13.16**
Fiscal Deficit	7.76	9.56	7.46	2.70	17.82	**9.06**
CB Financing	33.27	14.0	16.78	7.42	12.42	**16.79**
Gross Reserve	6.10	2.94	2.58	8.90	2.68	**4.64**
(2005-2009)						
Inflation	4.28	10.98	21.66	11.60	12.18	**12.14**
Fiscal Deficit	3.16	13.40	0.84	0.54	7.56	**5.10**
CB financing	0	15.16	18.28	0	7.82	**8.25**
Gross Reserve	5.48	3.46	0.64	13.48	4.38	**5.49**

Source: WAMI, 2009

Regional criteria	Average of 5yrs 2000-2004	Average of 5yrs 2005-2009	(+) / (-) Difference	WAMZ Benchmark	**Progress Report**
inflation	13.16	12.14	Decrease	10	**Converging**
Fiscal Deficit	9.06	5.10	Decrease	4	**Converging**
CB Fin Deficit	16.79	8.25	Decrease	10	**Converging**
Gross Res	4.64	5.49	Increase	6	**Converging**

The above table shows indeed that there is positive progress towards convergence by comparing two periods.

We can also use 2001-2008 performance to show evidence of Progress towards convergence based on number of criteria fulfilled.

Table 4.5 Convergence status (2001-2004 And 2005-2008)

Number of Primary Convergence Criteria Met By Each Country (2001-2008)									
Country	2001	2002	2003	2004	**Total**	2005	2006	2007	2008 **Total**
Gambia	2	0	0	2	**4**	2	3	3	3 **11**
Ghana	1	0	1	1	**3**	1	1	0	0 **2**
Guinea	2	1	0	0	**3**	2	1	2	2 **7**
Nigeria	3	3	1	3	**1 0**	3	4	4	3 **14**

Source WAMI, 2009

Examining table 4.5 it is possible to confirm the result of table 4.4 that there is indeed progress towards convergence using statistical test of mean difference for the period 2001 – 2008 by comparing the period 2001 – 2004 and 2005 – 2008.

Table 4.6 Comparing 4 yearly moving performances

Country	Total Criteria 2001-2004	Total Achieved	Difference From target
Gambia	16	4	12
Ghana	16	3	13
guinea	16	3	13
Nigeria	16	10	6
Sierra Leone	16	5	11
total	80	25	55

Country	Total Criteria 2005-2008	Total Achieved	Difference From target
Gambia	16	11	5
Ghana	16	2	14
guinea	16	7	9
Nigeria	16	14	2
Sierra Leone	16	4	12
total	80	38	42

To test the posited hypothesis, it must be proved that the mean difference from target for the four year period (2001-2004) is greater than that of the preceding (2005-2008) four years.

X_1	X_2	
		X_1 = 2001-2004 Difference
12	5	X_2 = 2005-2008 Difference
13	14	
13	9	
6	2	
11	12	

Our hypothesis is $H_0 : \overline{X_1} \geq \overline{X_2}$, $H_1 : \overline{X_1} \leq \overline{X_2}$

Applying the t – test

$$t = \frac{\overline{X_1} - \overline{X_2}}{S} \sqrt{\frac{n_1 \; n_2}{n_1 + n_2}}$$

X_1	X_2	$(X_1 - \overline{X_1})^2$	$(X_2 - \overline{X_2})^2$
12	5	1	11.6
13	14	4	31.6
13	9	4	0.4
6	2	25	41.0
11	12	0	13.0
55	42	34	97

$\overline{X_1}$ = 11, $\overline{X_2}$ = 8.4

$$t = \frac{11 - 8.4}{S} \sqrt{\frac{5 \times 5}{5 + 5}}$$

$$t = \frac{2.6}{S} \sqrt{2.5}$$

But $S = \sqrt{\dfrac{\Sigma (X_1 - \overline{X_1})^2 + \Sigma (X_1 - \overline{X_2})^2}{n_1 + n_2 - 2}}$

$$= \sqrt{\frac{131}{8}} = \sqrt{16.38}$$

$$= 4$$

$$t = \frac{2.6}{4} \sqrt{2.5}$$

$$t = 0.65 \times 1.6$$

$$= 1.04$$

$$v = n_1 + n_2 - 2 = 8, \quad t_{0.05} = 2.31$$

The calculated value is less than the table value at $t_{0.05}$ level of significance; indeed the mean difference from target of X_1 is greater than that of X_2 which is evidence of convergence towards the regional mark. H_0 is upheld, H_1 discarded.

Based on the WAMI data of Table 4.6 above, if the rate of progress towards convergence is maintained, how many years will it take the nations to achieve the convergence bench march, assuming that all things are equal and perfect convergence fulfillment is a must condition.

Mathematically,

If the 4- yearly performance progress is given as (table 4.6)

$$\frac{38 - 25}{25} \times \frac{100}{1} = 52\% \text{ or Annual progress of } 13\%$$

Or 8 years, if the progress is continuous, i.e. year 2018.

But Figure 4.1 of table 4.7 below has already shown that the progress is neither steady nor continuous.

Research Question 4

Is the progress of WAMZ nations towards convergence continuous or intermittent?

If we examine table 4.7 below, we will find that for 10 years 2000 – 2009, the progress result is as fallows

Table 4.7 How Nations fulfilled criteria in the period 2000 to 2009

No of nations that fulfilled criteria out of 5 Nations.										
Criteria \ Year	2000	01	02	03	04	05	06	07	08	2009
inflation	3	3	2	0	2	1	3	2	2	2
fiscal Deficit	2	1	1	1	1	2	3	3	3	3
CB fin of FD	3	4	1	1	3	4	3	4	4	4
reserves	2	2	1	0	1	1	1	1	1	2
Total	10	10	5	2	7	8	10	10	10	11
Maximum	20	20	20	20	20	20	20	20	20	20

Source: WAMI-imao

In this table in year 2000, only 3 nations instead of 5 met the inflation condition, 2 fulfilled the condition of fiscal deficits. If all the 5 nations fulfilled the 4 primary criteria for year 2000, the total will be 20, but actually only 10 of the maximum 20 conditions was fulfilled.

Figure 4.1 Graph of Table 4.7 (Total of particular criteria met yearly)
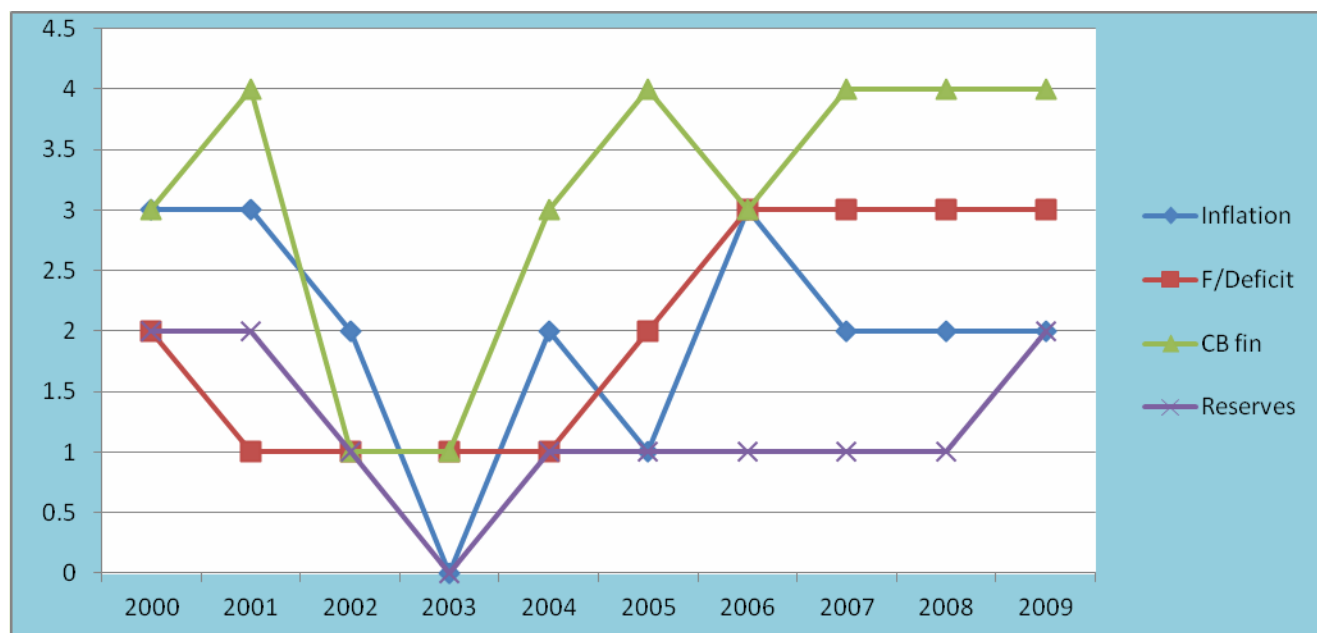
Source: WAMI-imao.org

The graph shows that in year 2000, only 3 of the five nations fulfilled both inflation criteria and central bank financing of fiscal deficit. Two nations fulfilled both fiscal deficit ratio and foreign reserves.

The graph shows that the pattern of fulfillment over the years is not steady, continuous or predictable for any particular criteria.

Figure 4.2 Chart of table 4.7 showing total of all criteria met yearly.
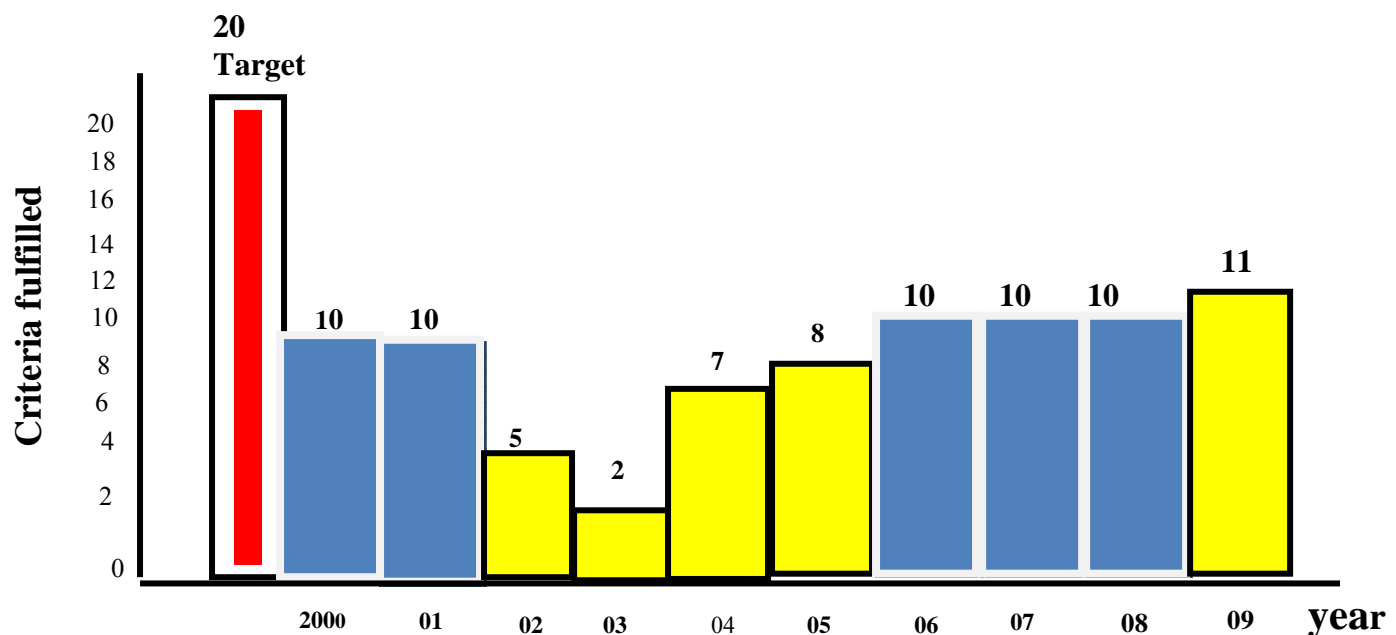
Chart 4.2 also shows that when added together, the progress on total criteria fulfilled annually is neither even, nor progressive nor predictable, 10 out of 20 in 2000 and 2001, down to 5 in 2002. Within the period 2006 to 2008, it was steady at 10 and increased slightly to 11 in 2009.

Table 4.8 Performance of Each Nation 2000 - 2009

criteria	2000 - 2009 (No. of criteria met)				
___	Gambia	Ghana	Guinea	Nigeria	sierra Leone
Inflation	8	2	3	3	4
F/Deficit to GDP	5	0	5	5	0

CB Fin of Deficit	7	5	5	9	5
Reserves	3	0	0	9	0
Total	**23**	**7**	**13**	**26**	**9**
Maximum	**40**	**40**	**40**	**40**	**40**

According to this table, Gambia fulfilled 23 out of a total of 40 (i.e. for each nation a total of 10 for the 10 years x 4 criteria) for the period 2000 to 2009, Ghana 7, Nigeria 26 which was translated to the bar chart below.

Figure 4.3   A Bar Chart Comparing Progress of Each Nation
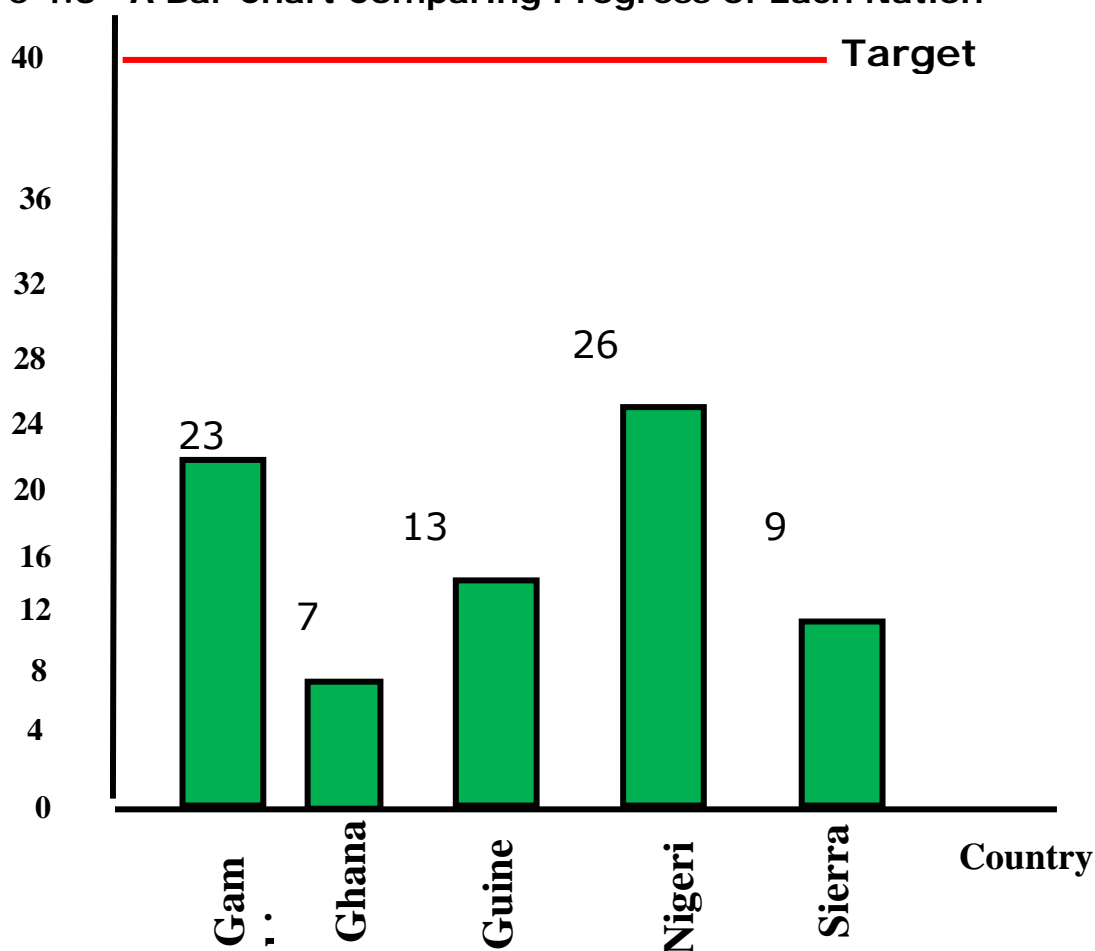
As different from the total regional performance, table 4.7 above, when the individual performances of each nation for the period is compared (chart 4.3) according to table 4.8, there is evidence of disparity in performance, with Gambia and Nigeria putting up above average performance.

Research Question 4

In June, 2010 the Governor of Chinas Central Bank announced that the Yuan is henceforth delinked from the US Dollar, assuring that the economy is both strong and stable, for the sustenance of a free and floating currency. What is the status of Chinese economy within the period in comparism to the regional economy of WAMZ?

Within the period this announcement was made, the status of Chinese economy in comparism to that of the WAMZ is shown in the table below

Table 4.9 Comparing Present Chinese Economy and WAMZ,

SECTOR	CHINA	WAMZ AVERAGE
GDP PER CAPITA	$3,999	$601

GDP% SHARE OF WORLD TOTAL (PPP)	13.2%	0.55%
FOREIGN RESERVE	$2.5 trillion	$10,139 billion
INFLATION (CPI)PPP	24% (2000=100)	150% (2000=100)
UNEMPLOYMENT	4.3%	65%
%BELOW POVERTY	2.8%	55.4%
CORUPTION INDEX	3.6 or 64%	2.6 or 74%

Latest International Figures (IMF, UNDP, TI, CIA, WRI, ETC)

With a per capita GDP of $3,999, a world total GDP share of 13.2%, almost equal to the entire EU average figure for the same period of 14.5%. Also a low unemployment rate, inflation rate and a large foreign reserve whose value is equivalent to 30% of the world total, china indeed is ready to take on the world, floating a Yuan whose strength will command the respect of currency investors as a dependable and viable alternative to unpredictable and vacillatory dollar and euro.

With an economy that is partly free and partly state controlled, the economy of china will avoid the wild swings at slight provocations that hitherto are the bane of unfettered modern economy.

This journey started from the year of Chinese revolution, a journey of over 50 years accompanied by strong focus, determination, sacrifices and undiluted patriotism, the next world power has just announced her arrival in the world stage.

In comparism, WAMZ economy is still miles behind, portraying figures that for now cannot sustain a free and floating currency.

Research Question 5

Is the awareness level high among the WAMZ citizens of the move to adopt a single currency?

H_o: Awareness of the move to form a monetary union is not high among the informed public for WAMZ nations.

H_1: The awareness of the move to form a monetary union is high among the public

If the result of awareness test is high, then the popularity test or referendum opinion will become necessary.

Our hypothesis is

H_o: $P = P_o < 0.5$

H_1: $P = P_o > 0.5$, $\propto = 0.05$

Table 4.10 Opinion awareness test in 5 Nigerian Universities

Opinions	No of Respondents	Percentage
YES	15	15
NO	80	80
INDIFFERENT	5	5
TOTAL	100	100

Using Z Statistic to test the proportion of success

$$Z = \frac{\overline{P} - P}{\sqrt{\dfrac{P(1-P)}{n}}}$$

Where $\overline{P}$ = Observed proportion of success

P = Standard proportion of success,

n = Sample size

Critical value : Z_α = 1.645

Sample Size n = 100

Sample Proportion = P = $\dfrac{15}{100}$ = 0.15

$$Z = \frac{0.15 - 0.5}{\sqrt{\dfrac{0.5(1 - 0.5)}{100}}} = \frac{-0.35}{\sqrt{\dfrac{0.25}{100}}} = \frac{-0.35}{0.05} = -7 < 1.645$$

We accept the null hypothesis; the awareness is far below 50%. The need for popularity test does not arise. Although this test may sound more political than economic, yet the consent of citizens are important because if things go wrong in future they will be called upon to make sacrifices in the austerity that will follow.

Before the European monetary Union commenced in 1999, what was the result of referendum in various countries.

Table 4.11 European Union Referendum, Euro barometer 48,

Nation	Yes %	No %	Neutral
Italy	78	11	11
Ireland	67	18	15
Luxemburg	62	28	10
Spain	61	23	16
Greece	59	27	14
France	58	36	6

Belgium	57	32	11
Netherlands	57	37	6
Portugal	45	29	26
Austria	44	43	13
Germany	40	45	15
Sweden	34	56	10
Finland	33	62	5
Denmark	32	62	6
UK	29	59	12

Source: Euro barometer 48, March 1998

Research Question 6

What is the level of opinion among EU nations before the adoption of euro

H₀: In EU opinion poll, the YES Percent was greater than 50% at the eve of the EMU in 1999.

H₁: In EU opinion poll, the YES Percent was not greater than 50% at the eve of the EMU in 1999

To test the posited hypothesis using Z statistics test of proportions, we make an opinion table out of table 4.11 based on Euro Barometer 48

Opinion	Response%	Percentage
YES	756	50.4
NO	568	38.0
NEUTRAL	176	11.6
TOTAL	**1500**	**100**

Our hypothesis is

H_o: $P = P_O > 0.5$

H_1: $P = P_O < 0.5$, $\alpha = 0.05$

Using Z statistics to test for proportion of success

$$Z = \frac{\overline{P} - P}{\sqrt{\dfrac{P(1-P)}{n}}}$$

Where $\overline{P}$ = Observed proportion of success
P = Standard proportion of success,
n = Sample size
Critical value: $Z_\alpha = 1.645$

Sample Size n = 1500

Sample Proportion = $\overline{P} = \dfrac{50.4}{100} = 0.504$

$$Z = \frac{0.504 - 0.5}{\sqrt{\dfrac{0.5(1 - 0.5)}{100}}} = \frac{0.004}{\sqrt{0.0025}} = \frac{0.004}{0.050} = 0.08$$

0.08 < 1.645 (Critical Value of Z)

H_0 is upheld, the average of favourable opinion in 15 EU nations was above 50% before EMU was formed in 1999

Research Question 7

Can an independent Currency Be Sustained by WAMZ Nations in Both Short and Long Run.

To answer this question, we examine the status of the industrial economy of the nation's proposing the union in comparism with the EU, a successful monetary union.

This status is examined with the aid of charts, figures and tables according to the principles governing the purchasing power of a currency. In the words of Mithani (1982), the absolute version of Purchasing power parity theory stresses that the exchange rate should normally reflect the relation between the internal purchasing power of the various national currencies.

Following this line of thinking, the strength and stability of a currency will be determined by:

1. GDP (Volume and Per-Capita Growth)

2. Inflationary Trend (Stability in Internal Productivity)

3. External Reserves (Volume of Sovereign Buffer Fund)

4. Trend of Fiscal Balance (Difference in Earning and Spending)

5. Share of Services in GDP (Volume of Economic Activity)

Using data supplied by various international agencies and national governments, comparism will be made between the status of EU and WAMZ to test the level of difference in terms of these cardinal determinants for the two regions.

COMPARING VARIOUS ECONOMIC STATUS CONVERGENCE RATIOS EU, WAMZ, WAEMU.

1. GDP COMPARISM

Table 4.12 GDP per Capita EMU/WAMZ 2001 (Units of $)

YEAR 2001

EU-11		WAMZ- 5		WAEMU-10	
Country		Country		Country	
Austria	23,862	Gambia	307	Benin	381
Finland	23,599	Ghana	281	B/Faso	241
Belgium	22,489	Guinea	368	Camer	602
France	22,547	Nigeria	358	Chad	223

Germany	22,957	S/Leone	164	Cotedvr	618
Ireland	27,234	**R/ total= 1478**		Gabon	3811
Italy	19,541	**R/Aver = 295.6**		Mali	264
Luxem	45,789			Niger	163
Netherl	24,990			Sengal	460
Portugal	11,291			Togo	240
Spain	14,971			**R/total= 7003**	
R/total= 259,270				**R/Aver= 700.3**	
R/Aver= 23,571					
Ratio EU: WAMZ = 80: 1				**WAEMU: WAMZ = 2.4: 1**	

Source: IMF Data base,2010

If we examine table 4.12 above, the figures from IMF data base 2010 shows that the regional average per capita income for EU-11 nations for 2001 is $23, 570 while that of WAMZ- 5 nations is $296 which gives an EU to WAMZ ratio of $80: $1, i.e. If a citizen of WAMZ receives a dollar for spending, the same citizen of EU will receive an equivalent of eighty dollars. When we consider the figures for WAEMU, the French zone of West Africa, the average income per capita is $700, which gives a WAEMU to WAMZ ratio of $2.4: $1.

Table 4.13 GDP per Capita EMU/WAMZ 2009 (Units of $)

YEAR 2009

EU-11 Country		WAMZ- 5 Country		WAEMU-10 Country	
Austria	43570	Gambia	433	Benin	877
Finland	40018	Ghana	695	B/Faso	545
Belgium	44217	Guinea	423	Camer	1022
France	39922	Nigeria	1108	Chad	640
Germany	37307	S/Leone	348	Cotedvr	1029
Ireland	49095	R/ total=3007		Gabon	6810
Italy	33253	R/Aver = 601.4		Mali	613
Luxem	94417			Niger	360
Netherl	47041			Sengal	975
Portugal	44259			Togo	388
Spain	30251			R/total	13,259
R/ total = 503,350				R/Aver	1,325.9
R/Aver = 45,759					

Ratio EU: WAMZ = 76: 1   WAEMU: WAMZ = 2.2: 1

In year 2001, (table 4.12) the average GDP per capita of EU- 11 nations was 23,570 dollars compared to that of WAMZ- 5 nations of 295.6 dollars, a ratio of 80 to 1 . This ratio decreased to 76:1 2009, (table 4.13) an indication of a decreasing efficiency in EU.

Table 4.14 GDP % Share of World Total (PPP)

Year	EU- 11 Total % Share	WAMZ- 5 Total % Share
2000	17.56	0.39
2001	17.53	0.41
2002	17.23	0.47
2003	16.78	0.50
2004	16.31	0.52
5-Yr Total	85.42	2.29
5-Yr Average	17.08	0.46
5- Yr Ratio	37 :	1
2005	15.90	0.51
2006	15.58	0.52
2007	15.25	0.52
2008	14.87	0.53

2009	14.48	0.55
5- Yr Total	76.08	2.63
5-Yr Average	16.15	0.49
5- Yr Ratio	**33** :	**1** `

Source: IMF Data base, 2009

According to the 5 yearly moving ratios, in the period 2000 to 2004, the average percentage share of EU and WAMZ in total share of world GDP measured at purchasing power parity of currencies is 37:1 which diminished to 33:1, for the following 5 year period 2005 to 2009, an indication of a **narrowing tendency** and a decreasing efficiency in EU after the EMU?.

3. INFLATION COMPARISM

Table 4.15 Consumer Price Index (CPI) 2000 = 100

Year 2001

EU-12		WAMZ-5		WAEMU-9	
Austria	1.9	Gambia	8.0	Benin	2.3
Belgium	1.9	Ghana	21.2	Camero	4.8
Finland	2.3	Guinea	7.2	Chad	0.7
France	1.4	Nigeria	16.4	Coted'vo	4.7
Germany	1.3	S/Leon	3.4	Gabon	0.9

Greece	2.5	**Total**	**56.2%**	Mali	5.2
Ireland	4.3	**Aver**	**11.2%**	Niger	3.2
Italy	2.7			Seneg	3.8
Luxem	1.7			Togo	6.8
Netherl	5.1			**Total**	**32.4%**
Portug	3.9			**Aver**	**3.6%**
Spain	2.5				

Total **31.5**
Aver **2.6%**
Ratio: WAMZ: EU= 4:1, WAMZ: WAEMU= 3:1

According to the table, the regional average consumer price index for EU-12 nations in 2001 is 2.6% with year 2000 as base, for WAMZ- 5 nations it was 11.2% and for CFA zone or WAEMU, it was 3.6%, just considering price movement for one year.

Table 4.16 Consumer Price Index (CPI) 2000 = 100

Year 2009

EU-12		WAMZ-5		WAEMU-9	
Austria	18.2	Gambia	96.1	Benin	33.4
Belgium	19.0	Ghana	63.3	Camero	27.3

Finland	15.8	Guinea	280	Chad	19.9
France	17.3	Nigeria	196	Coted'vo	36.4
Germany	13.3	S/Leon	117	Gabon	18.7
Greece	32.8	**Total**	**752.4**	Mali	23.2
Ireland	26.5	**Aver**	**150.5**	Niger	34.4
Italy	21.9			Seneg	26.0
Luxem	21.0			Togo	34.1
Netherl	20.5			**Total**	**253.4**
Portug	25.6			**Aver**	**28.0**
Spain	27.9				
Total	**259.8**				
Aver	**22.6**				

Ratio: WAMZ: EU= 7:1, WAMZ: WAEMU= 5:1

Source: IMF Data Base 2010

According to table 4.16, after a period of eight years, 2009 the regional average consumer prices in EU-12 nations rose by 22.6%, while that of WAMZ-5 nations increased by 150.5% and that of WAEMU (CFA Zone) by 28%

What it shows is that if a bottle of Beer is $1.0 in year 2000, in year 2009 it will rise to $1.23 in EU, in WAMZ it will be $2.50, and $1.28 in WAEMU. High inflation figure indicates that these economies have low manufacturing base and more import dependent, with little control over production.

Fig 4.4 Inflation Convergence Trend

a. **EU –Three Years to EMU (</=3%)**
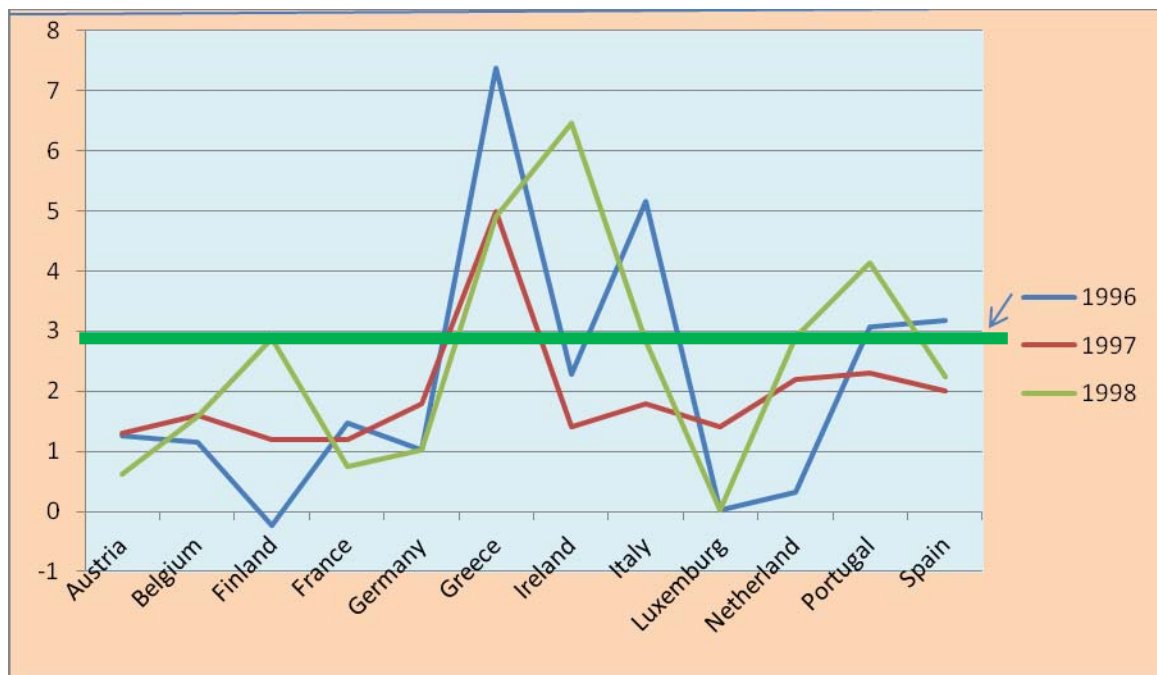
Inflation defines the strength, stability and elasticity of a nation's manufacturing base. If the base is strong, price level will be fairly stable over a long period.

Two years before EMU, nations like Greece, Italy and Portugal failed to satisfy the Maastricht convergence criteria of 3% inflation. But in 1998, eve of EMU only Greece failed to meet the inflation criteria.

b. WAMZ- Three Current Years Convergence (</=10%)
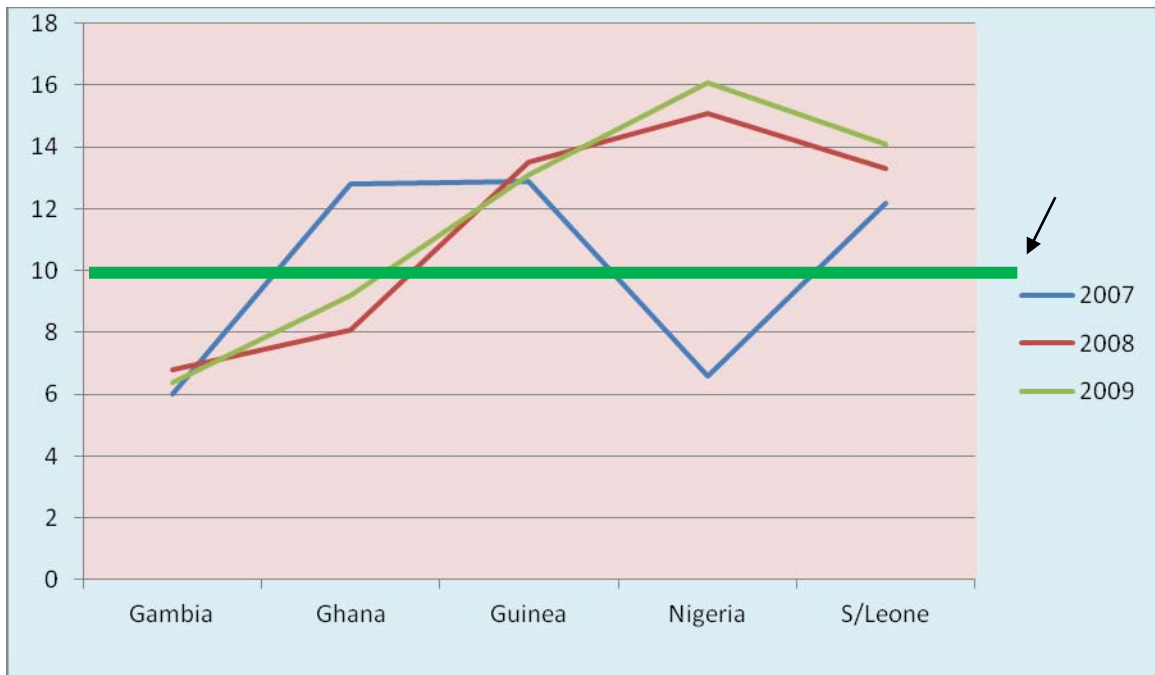
In WAMZ, only Gambia, and perhaps Ghana, posted a satisfactory level of Inflation which satisfied the single digit convergence criterion. Other nations posted figures above the regional bench mark, especially in the last two years under review.

4. FOREIGN RESERVES COMPARISM

Table 4.17 Foreign Reserves EU/WAMZ/WAEMU (Millions USD)

YEAR 2007- 2010 ESTIMATE

EU-12	Reser	WAMZ-4	Reser	WAEMU-8	Reser
Germ	182,745	Nigeri	40,480	Cote d'v	2,500
Fran	134,010	Ghan	2,837	Camer	2,341
Italy	133,033	Gamb	120	Gabon	1,459
Denm	76,315	Guinea	119	Seneg	1,350
Norw	49,223	**Total 43,556**		Chad	997
Nether	38,372	**Aver 10,139**		B/Faso	897
Spain	28,195			Benin	825
Belg	24,130			Togo	363
Aust	18,079			**Total**	**10,732**
Irel	16,229			**Average**	**1,342**
Port	16,294				
Luxe	5,337				
Gree	5,207				
Total	**698,797**				
Avera	**58,233**				

Ratio: EU: WAMZ= 6.7:1, WAEMU: WAMZ= 0.2:1

Source: Imf.org, swfinstitute.org
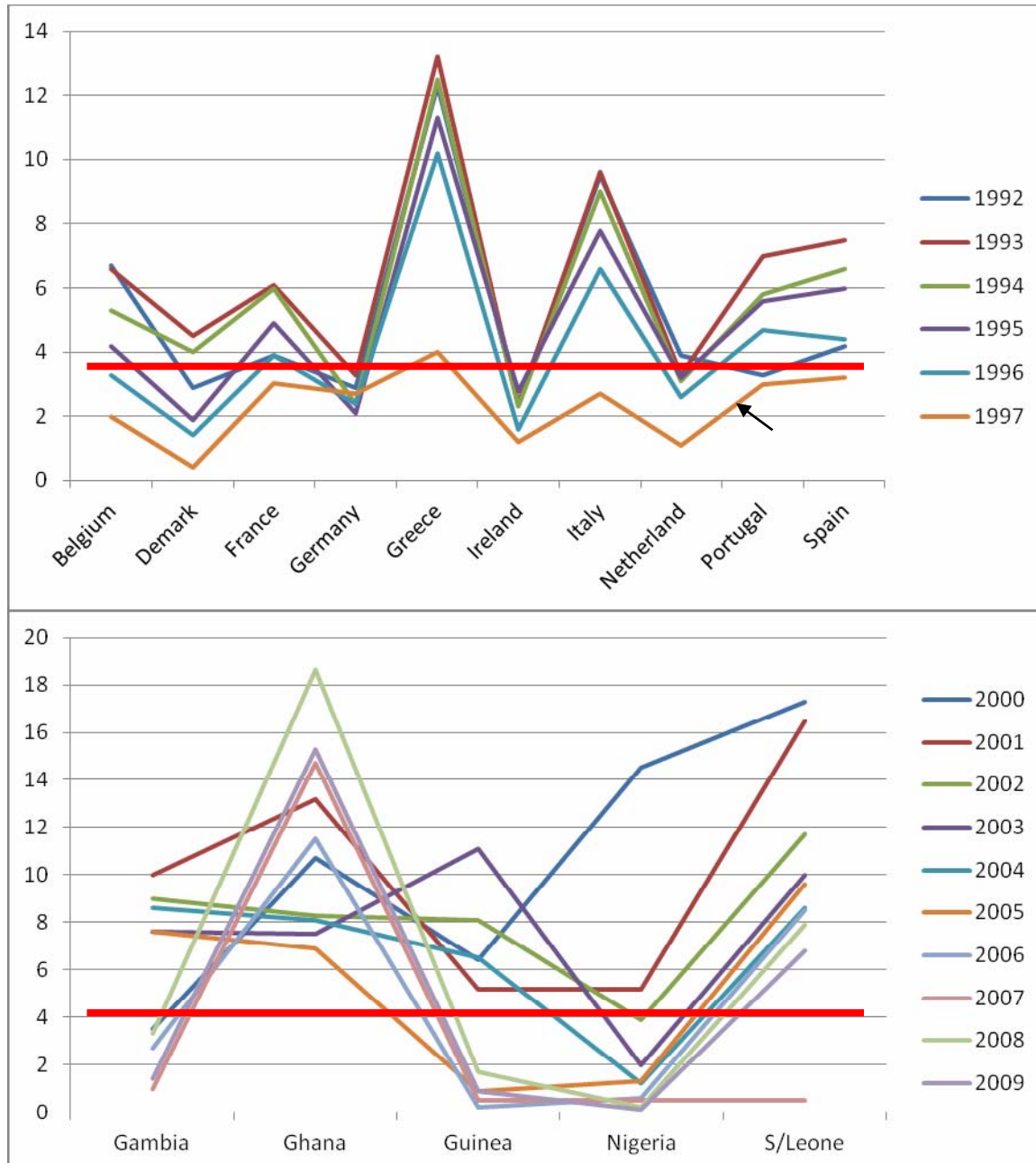
In table 4.17, the foreign exchange reserves defined as foreign exchange reserves into sovereign wealth funds and available for imports of essential items between 2007 to 2010 (IMF) estimate for EU, WAMZ, and WAEMU excluding SWAP arrangements. It measures the internal sufficiency of a nation, as the surplus supply value above total home demand.

Comparing the regional averages, we discover that for WAMZ or WAEMU, the reserves are too low for even a month import. It is an indictment of the deficiency of their industrial economy which due to various economic imperfections and political impediments can hardly satisfy home demand as to leave surplus for exports which generates the reserves.

4. COMPARISM OF FISCAL DEFICITS.

Figure 4.5 History of Budgetary Deficit (3% for EU, 4% for WAMZ)

(a) EU 6 Years Before EMU   (b) WAMZ 10 Years Report.

Source: EMI, 1996, EC 1995, Bank Austria, 2004, Fin. Times Feb 28/March 1998
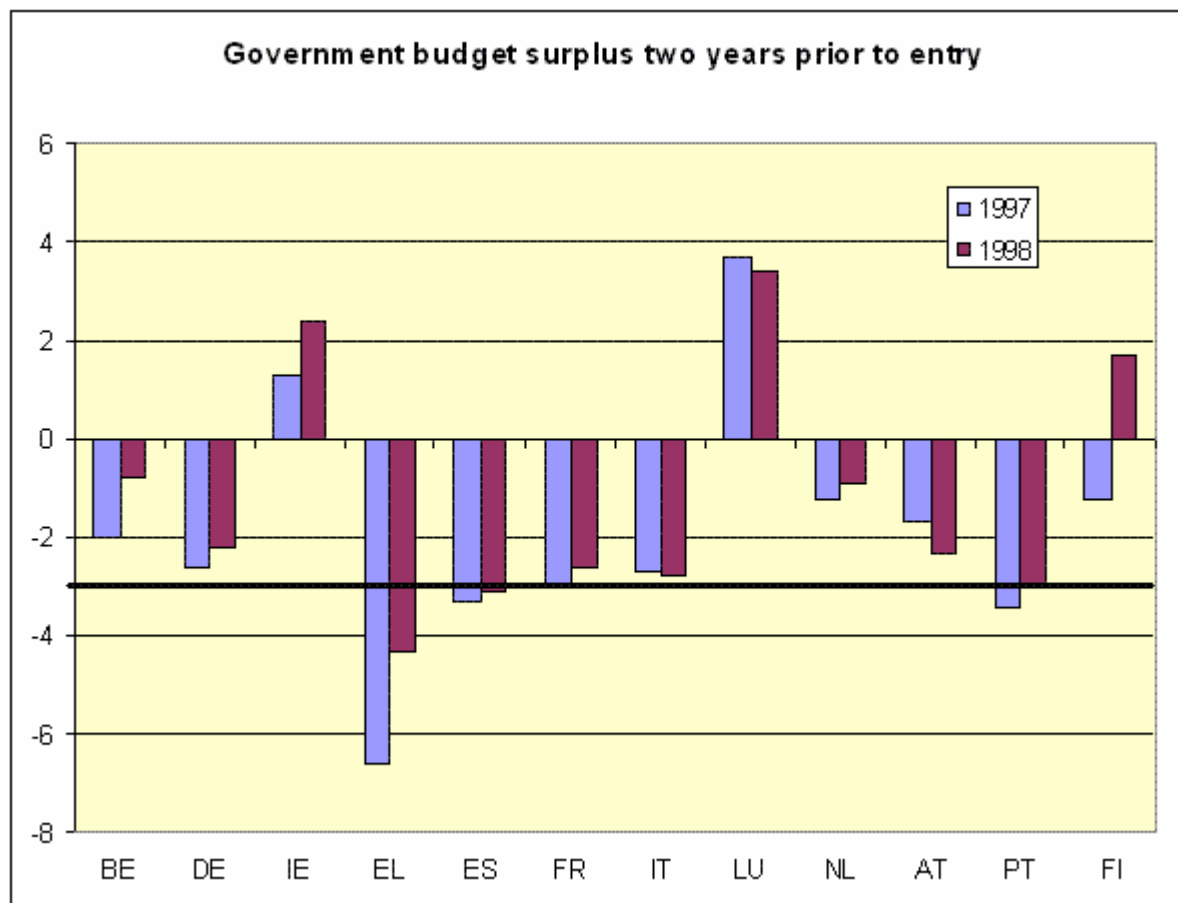
Between 1992 to 1997, a period of 6 years,   according to the
diagram, most EU nations were running deficits above the EU

bench mark but countries like France, Greece, Italy, Portugal and Spain are particularly notorious.

The figure for WAMZ shows that Gambia fulfilled this condition in 4 out of 10 years, Guinea 4 out of 10 years, and Nigeria 8 out of 10 years. Ghana and S/Leone has never fulfilled this condition for the 10 year period 2001- 2009.

Fig   4.6 History of Budgetary Policy Convergence

   (a)   EU.

Government budget surplus two years prior to entry

Source: European Commission, Statistical Appendix to European Economy.

Greece and Portugal failed to achieve the target in 1997, but in 1998 a year to EMU, only Greece failed to qualify.

(b) WAMZ

WAMI-imao
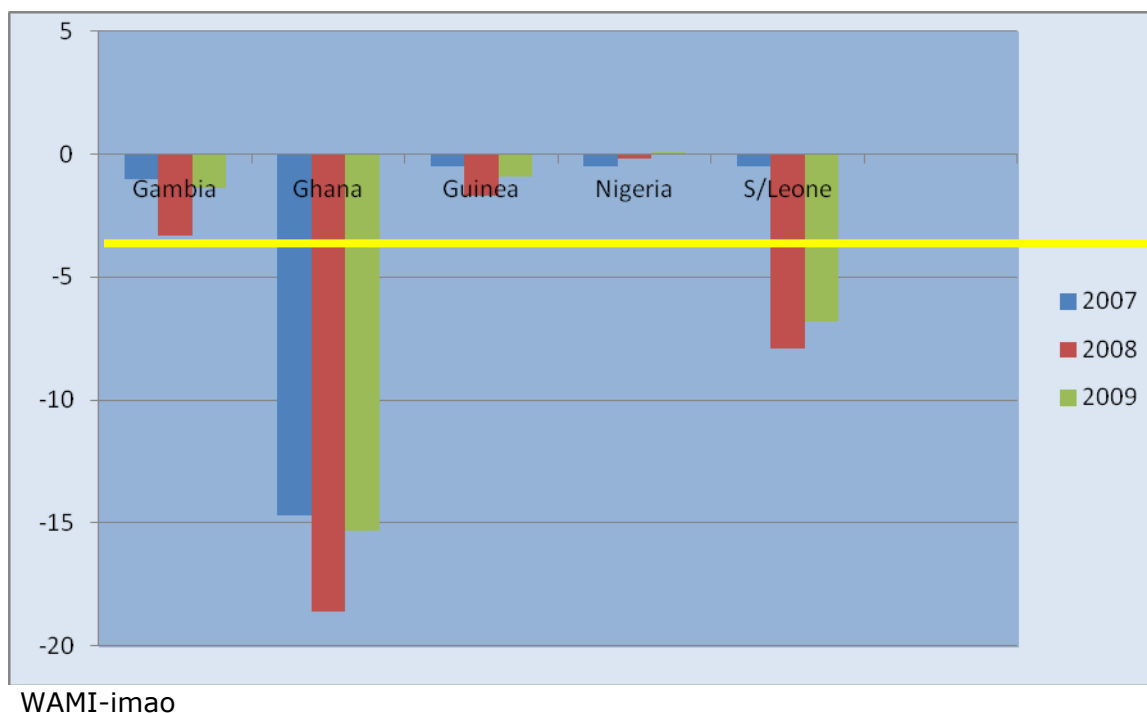
Ghana and Sierra Leone has not been consistent in meeting the budgetary requirement. It is clear from the above figure.

The budget history of European Union prior to EMU for 1996, 1997 and 1998 shows that majority of first line members satisfied consistently, the budgetary requirement of 3% deficit to GDP except few nations like Greece, Spain and Portugal, but in 1998 only Greece failed to make the mark and was prevented from joining the initial eleven nations who started the EMU in 1999, although commentators speak of 'reduced standard' which helped nations like Belgium and Italy to qualify.

The requirement for budgetary discipline is very important because participating member nations must prove their ability to earn and spend in a manner that will not require the withdrawal of resources from other properly managed nations to rescue her from unnecessary debt. Such rescue, if it continues will adversely affect other nations and eventually threaten the foundation of monetary cooperation. The fear of diluting their economy to the level of the lowest performing nation was the main reason why Britain opted to defer the adoption of the Euro.

That early weakness noticed in Greek economy has started causing ripples in European Union, who responded with a rescue package of several billion dollars in aid. This attempt to bail out Greece, earlier extended to Portugal, has created problems for citizens' of both countries who march in protest against various austerity measures, which was prescribed by the European central bank and IMF for EU nations seeking for economic bail out, like reducing overall government expenditures through

   a. Wage cuts

   b. Removal of subsidies

c. Cutting social security benefits

d. Raising taxes

e. Improving productivity.

f. And Freezing Pensions.

All being attempts to force a reduction in budget deficit gap.

The picture in WAMZ nations according to the figures 4.6 above, is that nations such as Ghana and Sierra Leone consecutively recorded deficit figures above the annual target for 2007, 2008 and 2009 and without evidence of conscious efforts on the part of these nations to improve, the story of subsequent years may not differ. It will be interesting to watch the figure for a nation like Guinea and perhaps Sierra Leone, in the coming years just due to expected shock emanating from recent election violence in both countries.

But balancing or converging budget gap may not be the best policy option in the short period for developing economies who require massive developmental efforts in almost all sectors of their economy. For now what is needed is attaining

Self-sustenance, which requires massive expenditures and occasional inflation, as a stimulus for investment.

5. COMPARISM - SHARE OF SERVICES.

Table 4.18 GDP% by sector contribution (Services Only)

EU-12	2000	2007
Austria	67	68
Belgium	73	74
Finland	68	67
France	71	77
Germany	68	70
Italy	67	69
Greece	64	74
Ireland	58	49
Luxem	69	72
Netherl	70	74
Portug	60	65
Spain	65	67
Total	**800**	**826**
R/Averag	**67%**	**69%**

WAMZ-5 NATIONS

Gambia	67	56
Ghana	39	38
Guinea	42	40
Nigeria	20	30
S/Leone	31	21
Total	**199**	**185**
R/Aver	**39.8%**	**37%**

WAEMU-9 NATIONS

Camer	37	39
Benin	49	52
B/Faso	47	48
CoteD'Iv	50	51
Gabon	30	36
Niger	42	44
Seneg	61	63
Togo	37	40
Chad	46	41
Total	**399**	**414**

R/Aver   44%   46%

**Ratio: EU: WAMZ (2000) = 1.7: 1 WAEMU: WAMZ =1.1: 1
              (2007) = 1.8: 1   = 1.2: 1**

Source: CIA Fact book, 2008

Table 4.18 shows the contribution of services in the nominal GDP of EU, WAMZ and WAEMU nations, for the years 2000 and 2007. Services includes activities in, (a) Banking (b) Communications/ IT industry, (c) Transportation (d) Insurance (e) Marketing and (f) Consultancy Services.

These provide the platform for the smooth functioning of primary, secondary, and tertiary creative productive activities, which is the sum of the value and volume of a nation's industrial economy.

If the volume of services is high, the Agriculture, Manufacturing and Extractive activities which require these services will *ipso facto* be high. Therefore, the volume of services indirectly determines the installed productive capacity of a nation.

The regional averages indicates that services contributed 67% in EU GDP and 39.8% for WAMZ and 44% for WAEMU in year 2000 and 69% for EU, 37% for WAMZ and 46% for WAEMU in year 2007. Going by our premise that volume of services is

determined by the weight of an industrial economy, 37% is very low indicating a poor weight for WAMZ economy as compared to 67% for EU.

Research Question 9:

Is Corruption Related to Poor Economic Performance and Poverty?

The relationship is shown in tables, figures and graphs below

Table 4.19 Corruption Index Vs GDP Per Capita Year 2001

EU-12	CPI	GDP	WAMZ-5	CPI	GDP
Austria	8.1	23,862	Gambia	2.3	307
Belgium	7.1	22,489	Ghana	3.9	281
Finland	9.4	23,599	Guinea	1.9	368
France	7.3	22,547	Nigeria	2.2	358
Germany	7.8	22,957	S/Leone	2.1	164
Italy	5.2	19,541	**Total**	**12.4**	**1,478**
Ireland	7.5	27,234	**R/Aver**	**2.5**	**295.6**
Greece	4.6	11627			
Luxem	8.4	45,789			
Netherl	9.0	24,990			

Portug	6.5	11,291
Spain	6.7	14,971
Total	**87.6**	**259,270**
R/Aver	**7.3**	**22,575**

Table 4.20 Corruption Index Vs GDP Per Capita 2009

EU-12	CPI	GDP	WAMZ-5	CPI	GDP
Austria	7.9	43,570	**Gambia**	2.9	433
Belgium	7.1	44,217	**Ghana**	3.7	695
Finland	8.9	40,018	**Guinea**	1.8	423
Fran	6.9	39,922	**Nigeria**	2.5	1108
Germany	8.0	37,307	**S/Leon**	2.2	348
Italy	4.3	33,253	**Total**	**13.1**	**3007**
Ireland	8.0	49,095	**R/Aver**	**2.6**	**601.4**
Greece	3.9	29043			
Luxem	8.2	94,417			
Netherl	8.9	47,041			
Port	5.8	44,259			
Spain	6.1	30,251			

Total   83.9   503,350

R/Aver   7.0   44,366

According to table 4.20, the actual percentage of corruption for EU as a region according to year 2009 figure, is 100-70= 30%, while that of WAMZ as a region is 100-26= 74% which is an indication of wide spread official corruption. When compared with the 2001 figure, table 4.19 it shows that there is no appreciable improvement in the fight against corruption in both regions.

But a closer look will reveal that at 30%, EU as a region is far better than WAMZ in terms of corruption which may account for the high performance of EU economies.

To probe further the relationship between corruption economic performance and poverty, one can theoretically analyze the relationship between corruption and poverty using the twin tools of regression and correlation based on figure 4.21 below

Table 4.21   Corruption Latest Rating WAMZ

Country	2004	2005	2006	2007	2008	2009	6 Year Average
Gambia	2.8	2.7	2.5	2.3	1.9	2.9	**2.5**
Ghana	3.6	3.5	3.3	3.7	3.9	3.9	**3.7**
Guinea	1.9	1.9	1.9	1.9	1.6	1.8	**1.8**
Nigeria	1.6	1.9	2.2	2.2	2.7	2.5	**2.2**
S/Leone	2.3	2.4	2.2	2.1	1.9	2.2	**2.2**
Regional Average	**2.4**	**2.5**	**2.4**	**2.4**	**2.4**	**2.7**	**2.5**

Source: Transparency International 2009

Table 4.22 Corruption Vs Poverty, Latest Figures

COUNTRIES	CORRUPTION RATING (6 YEAR AVERAGE)	POVERTY RATING POP. LESS $2/MONTH
GAMBIA	2.5 Or 75%	57%
GHANA	3.7 Or 63%	54%
GUINEA	1.8 Or 82%	87%
NIGERIA	2.2 Or 78%	83%
S/LEONE	2.2 Or 78%	83%
AVERAGE	**2.5 Or 75%**	**73%**

Source: TI 2009, UNDP 2000-2009, CIA FACT BOOK, 2003-2009

Figure 4.7 Correlations Of Corruption And Poverty (WAMZ As A Case Study)

Graph of Table 4.22.
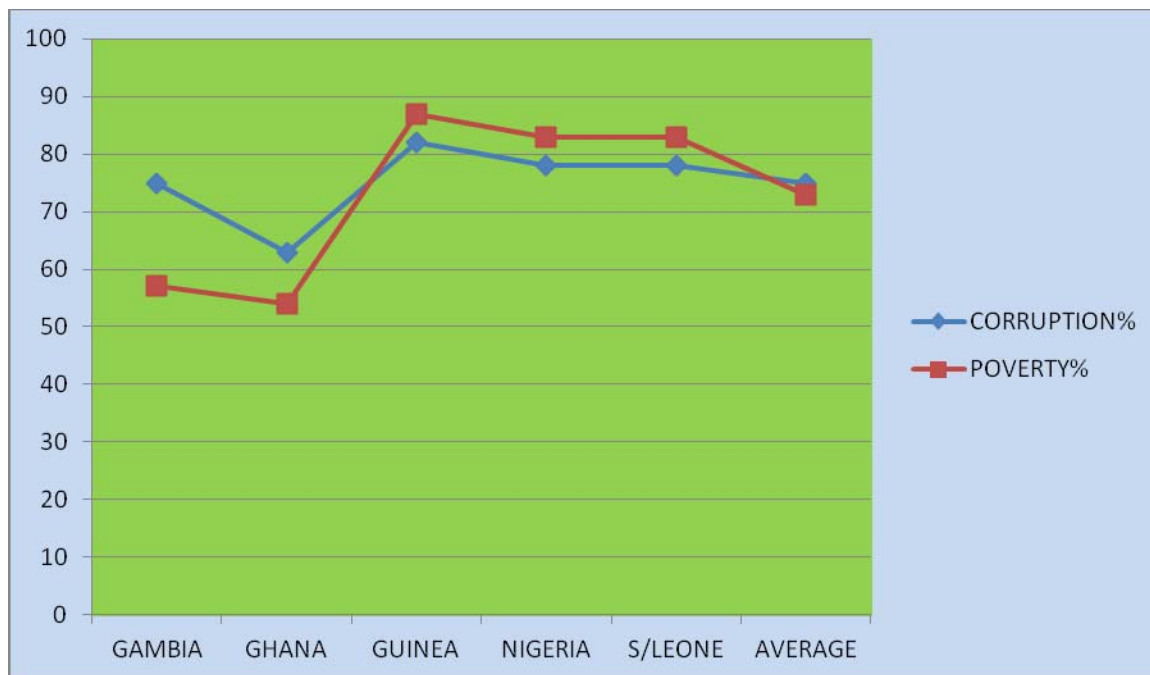
Nations like Gambia and Ghana have less corruption and so, less poverty than others. As shown in the above figure.

To know whether poverty is actually related to corruption, we shall posit the following hypothesis

H_0: Corruption and poverty are positively correlated

H_1: Corruption and poverty are negatively correlated

H_0 : $b_0 \geq 0$ (Positive linear relationship)

H_1 : $b_0 \leq 0$ (Negative linear Relationship)

The regression of Y on X = $Y-\bar{Y} = \dfrac{\Sigma xy}{\Sigma x^2}(X-\bar{X})$

The regression of X on Y = $X-\bar{X} = \dfrac{\Sigma xy}{\Sigma y^2}(Y-\bar{Y})$

The Coefficient of Correlation is $r = \dfrac{\Sigma xy}{\sqrt{\Sigma x^2 \times \Sigma y^2}}$

Probable Error $\quad$ (PEr) $= 0.6745\ \sqrt{\dfrac{(1-r^2)}{n}}$

X	Y	x(X - $\bar{X}$)	y(Y − $\bar{Y}$)	x^2	y^2	xy
75	57	0	13	0	169	0
62	53	13	17	169	289	221
82	87	-7	-17	49	289	119
78	83	-3	-13	9	169	39
78	83	-3	-13	9	169	39
75	57	0	13	0	169	0
450	**420**			**236**	**1254**	**418**

$\bar{X}=75, \bar{Y}=70$

Regression of Y on X is Y = 1.8x − 65

Regression of X on Y is X = 0.33y + 52

Coefficient of Correlation $= \sqrt{1.8 \times 0.33} \qquad = 0.77 \quad$ or

Coefficient of Correlation r $= \dfrac{418}{\sqrt{236 \times 1254}} \qquad = 0.77$

Probable Error = $0.6745\dfrac{(1 - 0.6)}{2.45} = 0.11$

Decision rule: If the calculated r is six times the value of probable error, we consider it significant and uphold H_0. Otherwise reject and accept H_1.

Therefore, if r = 0.77, and P.Er = 0.11, then r/P.Er = 0.77/0.11 or 7.0. The calculated r is more than six times the P.Er. H_0 is accepted, there is high positive correlation between corruption and poverty.

Table 4.23 EU Corruption and Poverty data 2009

COUNTRY	CORRUPION%	POVERTY%
NETHER	12	10
AUSTR	19	6
GERM	21	11
IREL	24	7
BELGIUM	27	15
FRANCE	28	6
SPAIN	33	20
PORTU	36	18
GREECE	56	20

Source: UN Human Dev. Report 2009

Figure 4.8 EU: Correlation of corruption and Poverty
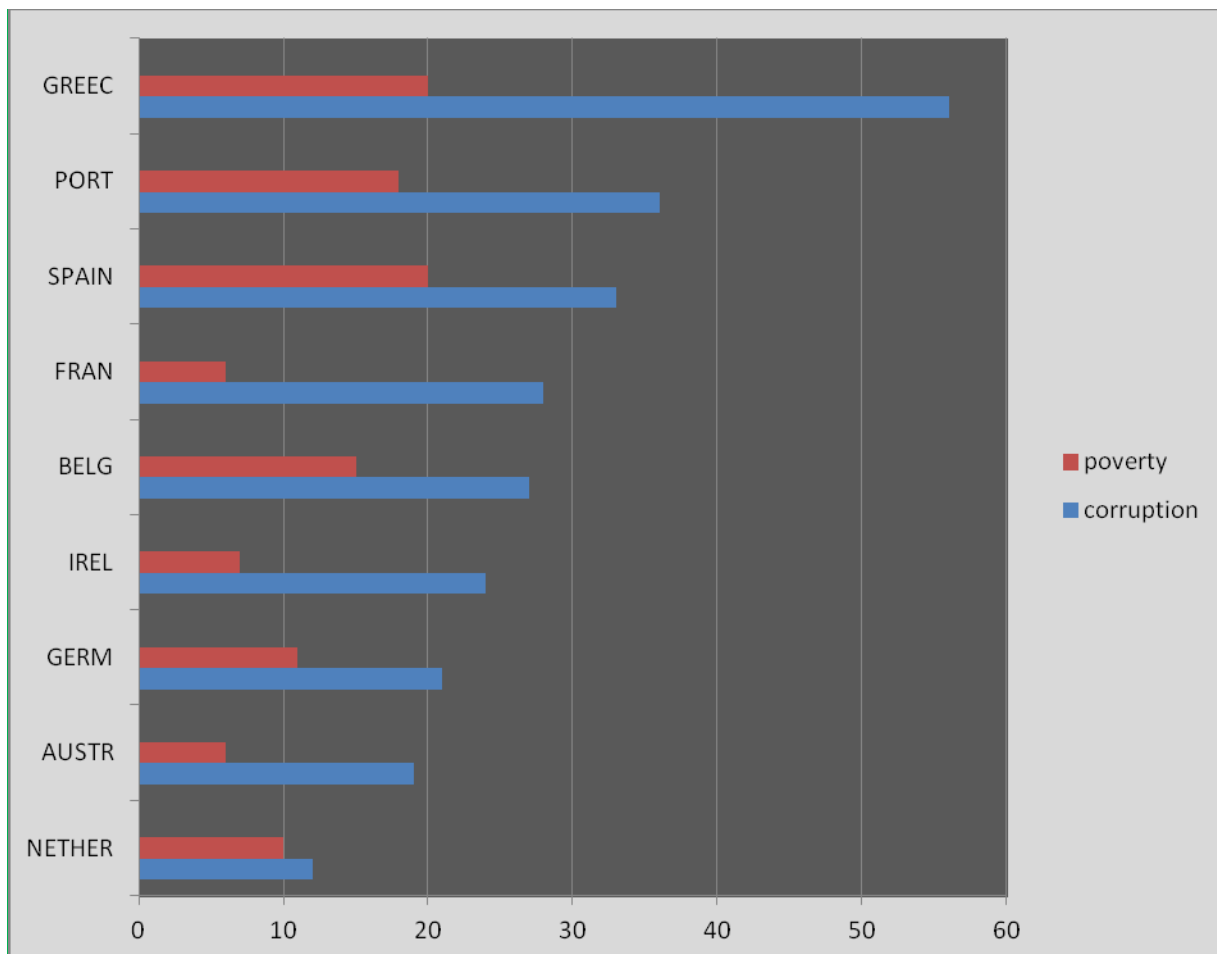
Source: UN Human Dev. Report, 2009

The chart tended to indicate that on average, the higher the corruption percentage, the higher the poverty rate, which even in European case, tended to authenticate our conclusion that the correlation between corruption and poverty is high and positive. European nations economic performances are high and poverty rate low because corruption level is low as shown below.

Table 4.24 % of Population living below poverty line (2007)

EU-10	%	WAMZ-5	%	WAEMU-8	%
Germ	11	Nigeria	70	Cote d'v	42
Fran	6.2	Ghana	28.5	Camer	48
Norw	4.3	Gambia	61.3	Mali	64
Nether	10.5	Guinea	47	Seneg	54
Spain	19.8	S/Leon	70.2	Chad	80
Belg	15.2	**Total**	**277**	Niger	63
Aust	5.9	**Aver**	**55.4**	Benin	39
Irelan	7.0			Togo	32
Portu	13.0			**Total**	**422**
Gree	20.1			**Average**	**53.0**
Total	**113**				
Avera	**11.3**				

Ratio: EU: WAMZ= 5:1 WAEMU: WAMZ= 1:1

Source: UNDP, CIA Fact book 2008

The table shows that for every five persons living below poverty line in WAMZ economic zone, only one such person is living below poverty line in EU region. The ratio is the same for WAEMU.

Table 4.25 Corruption Perception Index, 2001 and 2009

No Corruption Score = **10**
High Corruption Score = **1**

EU-12	2001 (Score)	2009 (Score)
Austria	8.1	7.9
Belgium	7.1	7.1
Finland	9.4	8.9
France	7.3	6.9
Germany	7.8	8.0
Italy	5.2	4.3
Greece	4.6	3.8
Ireland	7.5	8.0
Luxem	8.4	8.2
Netherl	9.0	8.9
Portug	6.5	5.8
Spain	6.7	6.1
Total	87.6	83.9
R/Aver	7.3	7.0
WAMZ-5		
Gambia	2.3	2.9

Ghana	3.9	3.7
Guinea	1.9	1.8
Nigeria	2.2	2.5
S/Leone	2.1	2.2
Total	**12.4**	**13.1**
R/Aver	**2.5**	**2.6**
WAEMU-9		
Camer	2.4	2.2
Benin	2.7	2.9
B/Faso	3.2	3.6
CoteD'Iv	2.7	2.1
Gabon	3.3	2.9
Niger	2.6	2.9
Seneg	3.6	3.0
Togo	2.3	2.8
Chad	1.7	1.6
Total	**24.5**	**24**
R/Aver	**2.7**	**2.7**

Source: Transparency International CPI 2009, ICCR, OECD, UNDP.

The regional average corruption index in the two regions in year 2001 is EU 7.2 points or 72% non-corruption, while that of WAMZ is 2.7 points or 27% non-corruption, but in 2009 non corruption reduced slightly in EU region to 70% while that of WAMZ remained steady at 27%.

Research Question 10

Did EU nations on average satisfy the average Maastricht convergence criteria before the commencement of the EMU.

H$_0$: Performances of EU nations was less than the average Maastricht convergence criteria before commencement of EMU in 1999

H$_1$: Performances of EU nations was greater or equal to the average regional Maastricht convergence criteria before the commencement of EMU in 1999

To answer this hypothesis we produce the status of EU member states on Maastricht convergence criteria indicators for the period 1990 to 1997

Table 4.26 EU Member states Status on MCC indicators 1990- 97

Country	1990	1991	1992	1993	1994	1995	1996	1997	Aver.
Luxemburg	5	5	5	4	5	5	5	5	5
Denmark	5	4	4	3	3	4	4	4	4
France	5	5	4	4	4	4	4	5	4
Germany	5	4	4	3	5	4	3	4	4
Ireland	4	4	4	3	3	4	4	4	4
Austria	4	4	3	2	3	3	3	4	3
Belgium	2	3	3	3	3	3	3	4	3
Netherland	3	4	3	3	3	3	4	4	3
UK	3	3	2	2	3	3	2	4	3
Finland	2	2	1	1	2	2	3	4	2
Sweden	2	3	2	1	1	1	2	3	2
Spain	1	1	1	1	1	1	1	4	1
Portugal	0	0	0	0	0	0	1	4	1
Greece	0	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	3	0
Total Met	4	2	1	0	2	1	1	2	2

Source: The Bruges Group 2004.

The performance of EU nations two years to the commencement of EMU 1997 is shown in table 4.23. Comparing these figures to the regional bench mark of 5 annually, will answer the next hypothesis.

We can approach the solution through the regional total met or individual nation's performance close to the eve of EMU 1997.

Using 1997 figures, the comparison with the regional maximum bench mark can be made and conclusions drawn using t statistic of mean difference.

Our hypothesis is

$H_0 : \overline{X}_1 - \overline{X}_2 < 0$, (Where X_1 =Condition fulfilled, X_2= Benchmark)

$H_1 : \overline{X}_1 - \overline{X}_2 = 0$

Applying the t – test

$$t = \frac{\overline{X}_1 - \overline{X}_2}{S} \sqrt{\frac{n_1 \ n_2}{n_1 + n_2}}$$

X_1	X_2	$(X_1 - \overline{X}_1)^2$	$(X_2 - \overline{X}_2)^2$
5	5	1.69	0
4	5	0.09	0
5	5	1.69	0
4	5	0.09	0
4	5	0.09	0
4	5	0.09	0
4	5	0.09	0
4	5	0.09	0
4	5	0.09	0
4	5	0.09	0

3	5	0.49	0
4	5	0.09	0
4	5	0.09	0
0	5	13.69	0
3	5	0.49	0
56	**75**	**18.95**	**0**

$\overline{X_1} = 3.7$

$\overline{X_2} = 5.00$

But S $= \sqrt{\dfrac{\Sigma (X_1 - \overline{X_1})^2 + \Sigma (X_1 - \overline{X_2})^2}{n_1 + n_2 - 2}}$

$= \sqrt{\dfrac{18.95 + 0}{30 - 2}} = \sqrt{0.68} = 0.82$

t $= \dfrac{3.7 - 5}{0.82} \sqrt{\dfrac{225}{30}}$

$= -1.59 \sqrt{7.5}$

= - 1.59 x 2.7 or - 4.35

-4.35 is less than the table value of $t_{0.05}$ at $v = 28$ degrees of freedom, we conclude that EU nations did not fulfill all the

Maastricht convergence criteria before the formation of EMU in 1999. H_0 is accepted.

Research Question 11

Is monetary Union Actually Beneficial

To answer this question we shall look at the graphic presentation of the following performance statistics from mainly EU and WAEMU, who are currently enjoying such status as shown in the diagrams below.

A. EU STATISTICS

Below are key economic statistics from the EU region both pre and post EMU.
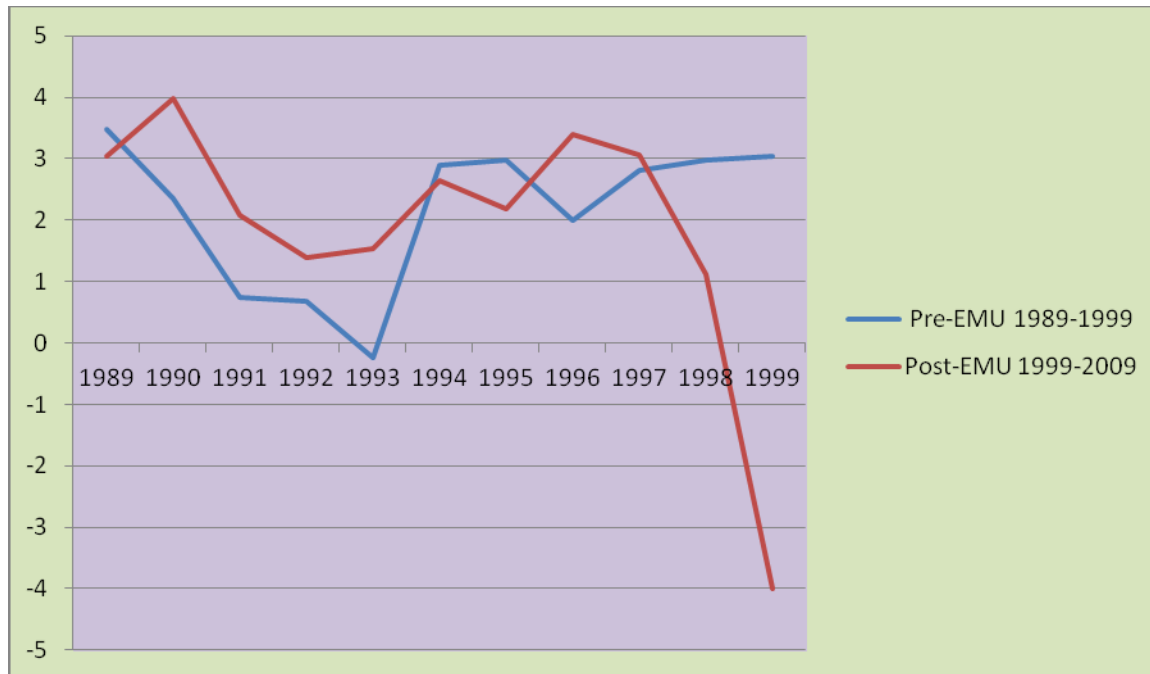
Figure 4.9   EU-12   % Share (PPP) of World GDP 2000-2009
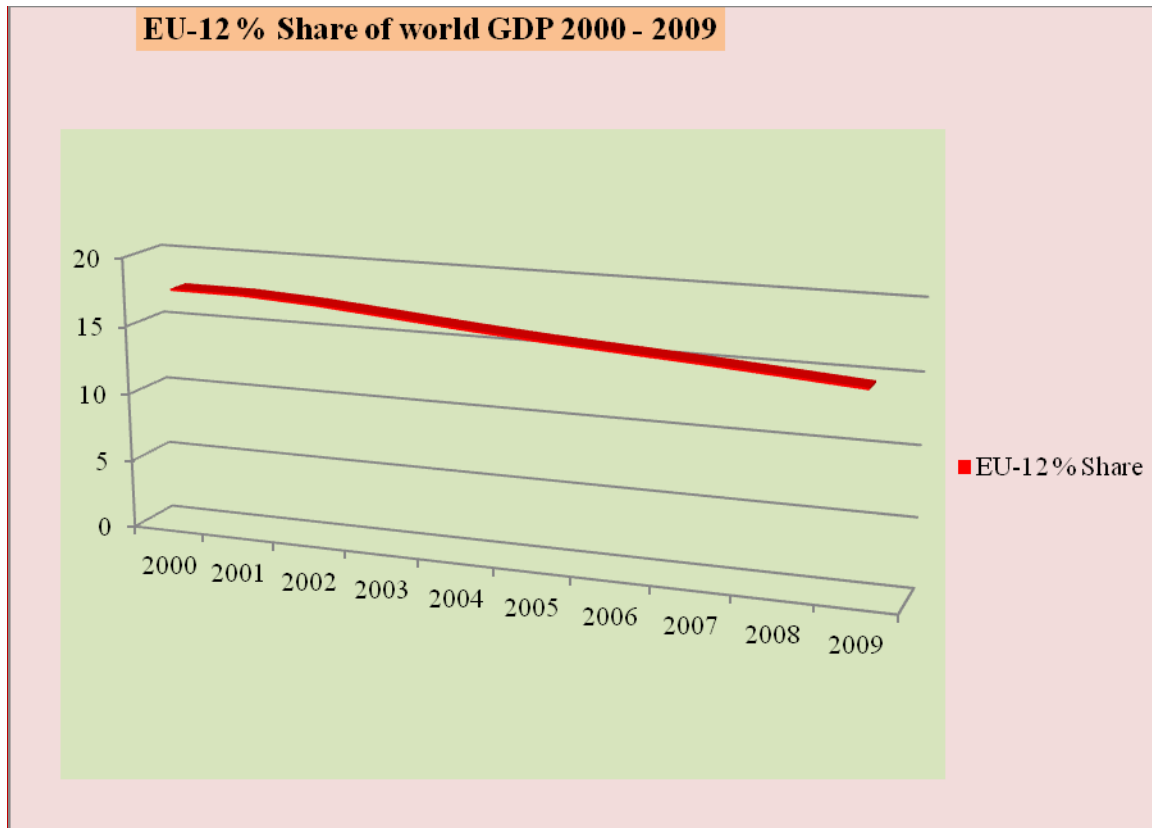
The chart (IMF Figures) shows that the percentage share of EU in the world GDP was 17.5% in year 2000, but declined to 14.5% in 2009.

Figure 4.10 EU GDP (Constant Prices) Annual Percent Change

Pre And Post EMU 1989-1999 And 1999-2009

Source: IMF World Economic Outlook, Data Base 2009

Using constant prices with 1999-2009 superimposed on Pre-EMU decade, the percentage change in GDP annually, improved from 1999, but was not sustained from 2004 ending dismally in 2009 at -4%.

Figure 4.11 EU Investment % of GDP Pre And Post EMU

1989-1999 And 1999-2009
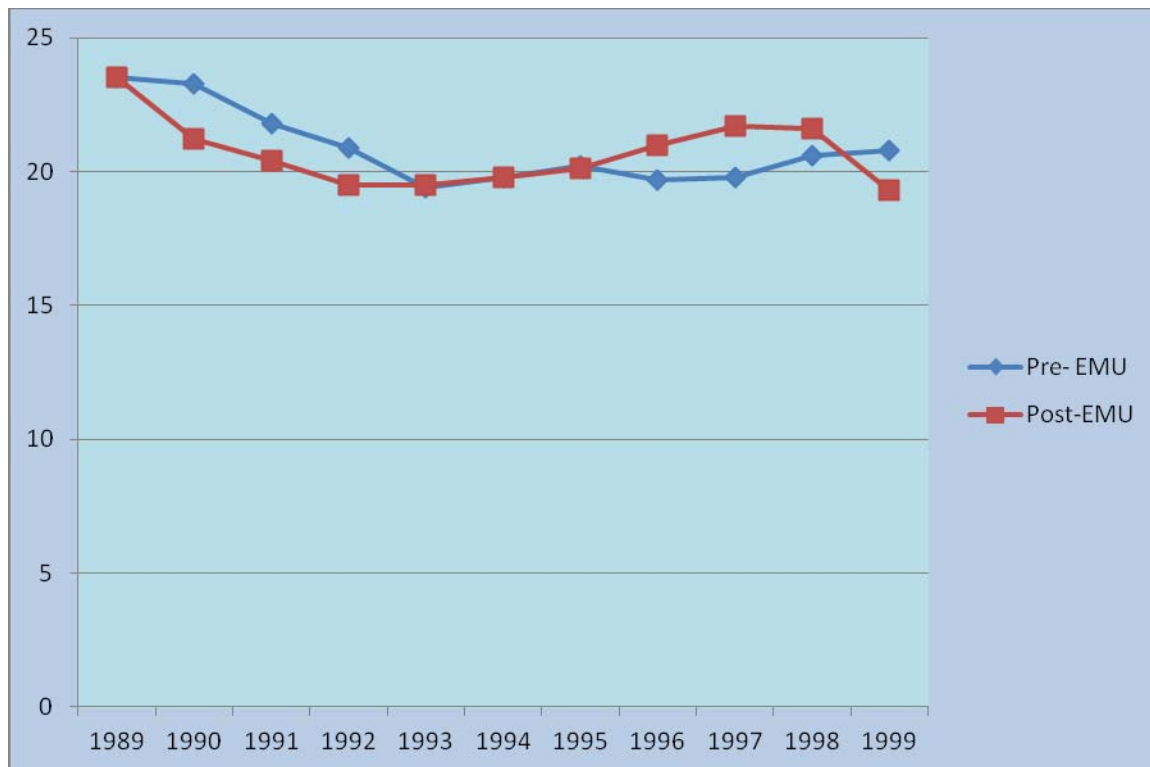
Source: IMF World Economic Outlook, Data Base 2009

The proportion of GDP that goes to investment declined from 1999 up to 2004. It rose above pre-EMU figures, but began to fall from 2008 and ended in 2009 at 19% from a high of 23% in 1999.

Table 4.27 Comparism EU-12 Vs UK Economy 2009/10 Figures

S/No	Descriptor	EU AVERAGE	UK
1	GDP PER CAPITA	$45,981	$33,334
2	GDP SHARE OF WORLD TOTAL	1.3%	3.1% √
3	INVESTMENT % OF GDP	18.5%	13.8%
4	POP. LIVING BELOW $2	11.3%	14%
5	SHARE OF SERVICES IN GDP	69%	74% √
6	FOREIGN RESERVE ($Millions)	58,233	96,968 √
7	CORRUPTION PERC. INDEX	30%	23% √
8	PER CAPITA ENERGY CONSUMP	4,617kgoe/a	3,910kgoe/a
9	INFLATION (CPI 2000=100)	20.4%	19.8% √
10	UNEMPLOYMENT	8.2%	7.9% √

Source: IMF Data Base 2010

If we examine this table, it can be concluded that the average performance of EU-12 economy in several sectors after ten years of EMU are below average, when compared to that of Britain, who chose to remain independent. Is this a proof that largeness after all may not possess all the economic magic ascribed to it, and is the British right then, in delaying their membership of EU?

Table 4.28 *% of unemployment In EU (2001 And 2009)*

EU-12

Country	2001	2009	
Germ	7.8	7.5	
Fran	8.5	10	Average Change
Norw	3.6	3.3	$\underline{8.2 - 6.5}$ x $\underline{100}$
Nether	2.5	3.6	6.5 1
Spain	10.4	20	= 26% or 2.9% Average
Belg	6.7	7.9	Rise Annually.
Aust	3.6	5.3	
Portu	4.1	9.2	
Gree	10.4	9.2	
Fin	9.1	8.5	
Italy	9.4	7.4	
Luxe	2.1	6.6	
Total	78.2	98.8	
Average	6.5	8.2	

Source: UNDP, CIA Fact book 2010, UNECE 2005, EUROSTAT.

Figure 4.12 EU Unemployment trend 9 years after Euro.

Comparing unemployment pre-Euro and post- Euro (2001 and 2009)

	Germany	France	Norway	Netherland	Spain	Belgium	Austria	Portugal	Greece	Finland	Italy	Luxemburg	EU Average
%Unemp 2001	7.8	8.5	3.6	2.5	10.4	6.7	3.6	4.1	10.4	9.1	9.4	2.1	6.5
%Unemp 2009	7.5	10	3.3	3.6	20	7.9	5.3	9.2	9.2	8.5	7.4	6.6	8.2
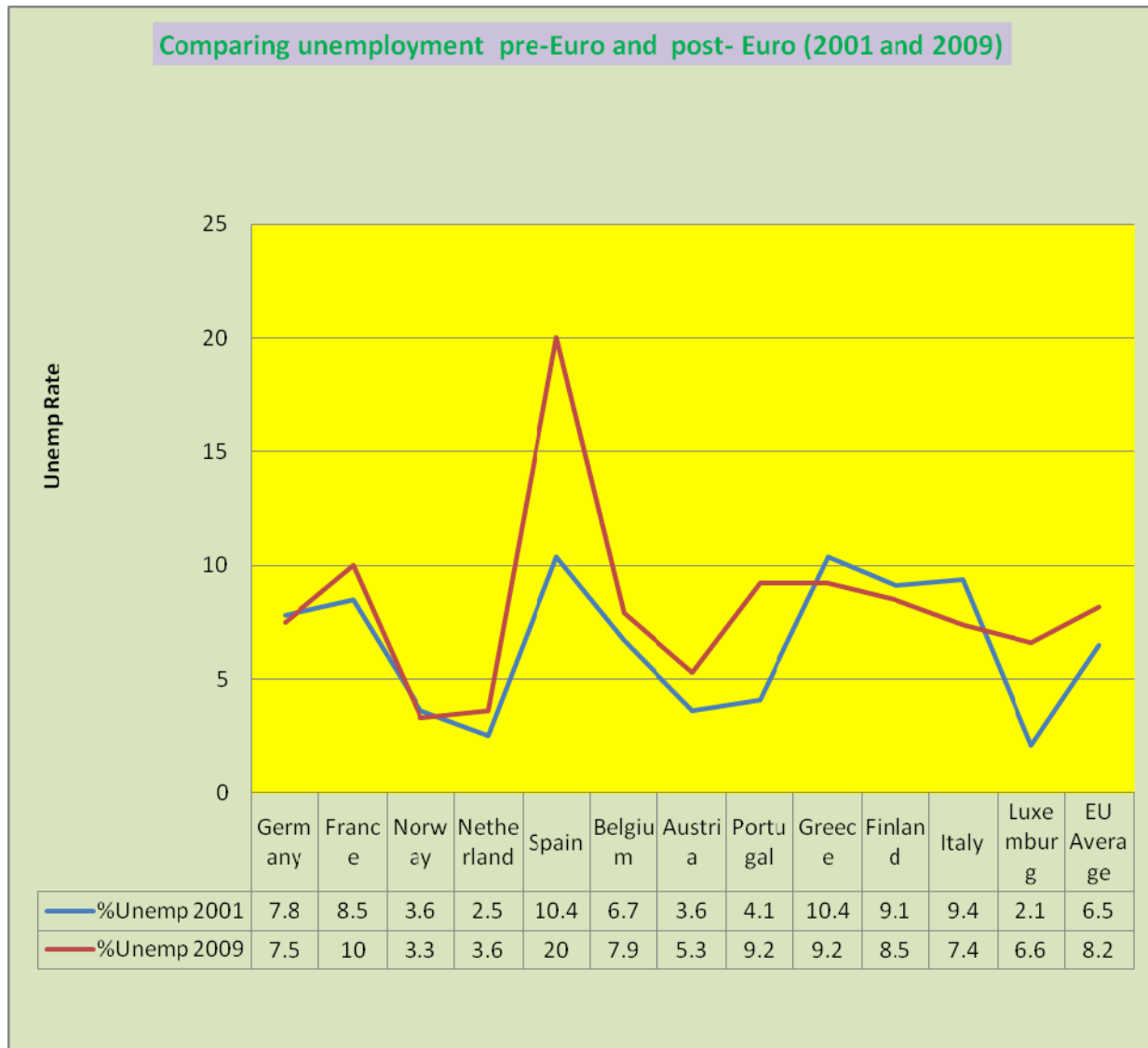
The difference between EU average unemployment rate for 2001 and 2009 shows a 26% increase in unemployment rate over the 9 years period, which is an average growth rate of 2.9% annually. Rising unemployment, decline in annual GDP growth rate, share percentage in world GDP and investment per cent of GDP, all

casts doubt as to the much expected benefits inherent in a monetary union.

 Meanwhile, as citizens of EU protest against poor economic performances and austerity measures, they seem to be saying that the union has not achieved much, as shown in the pictures below.

Pictures 4.1 EU Workers protesting against austerity measures

Greece- Athens May 5, 2010 CNN.com/Europe

PHOTO: PATRICIA DE MELO MOREIRA/AFP/GETTY IMAGES

Portugal- Lisbon May 29, 2010 CNN.com/Europe

France- Paris April 4, 2010 CNN.com/Europe

Italy- Rome April 5 2010 BBC.com/news

France (Paris) - Port workers on the march, April 2010.

B. WAEMU STATISTICS

Figure 4.13 WAMZ and WAEMU: Statistics in Graphs

i.   Inflation (Annual Rate %)
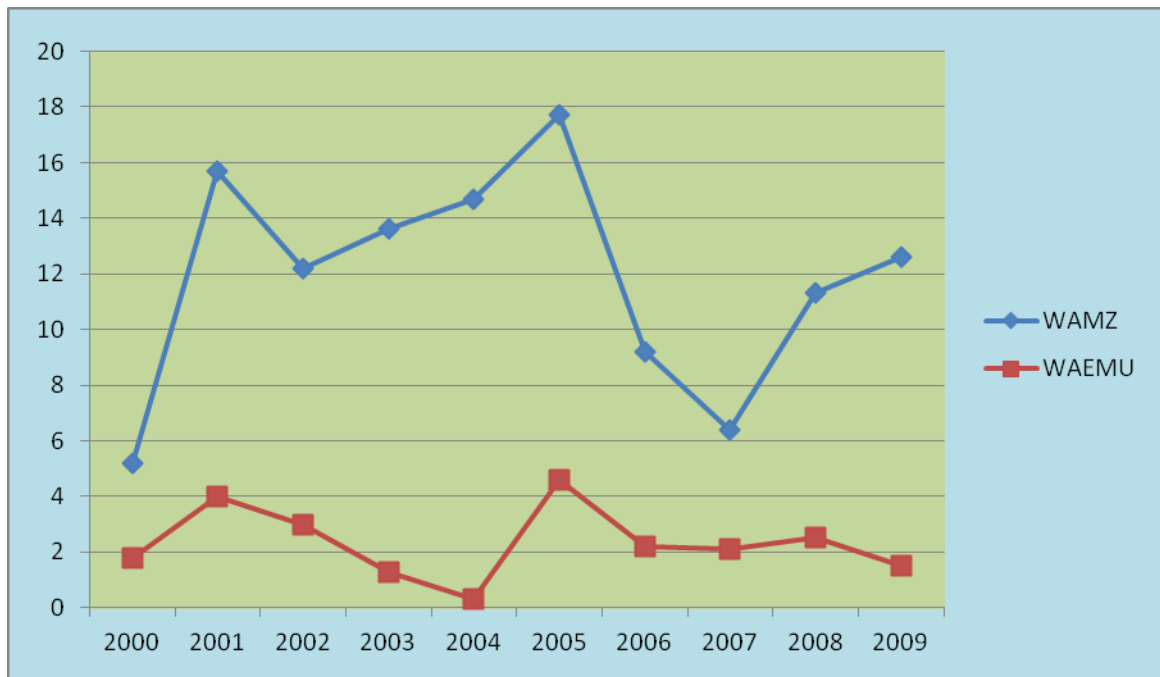
Source: ECA-WA

The figure shows evidence of good monetary management in WAEMU nations. But continuity of such advantage did not seem to show elsewhere.

ii GDP Annual Growth Percent
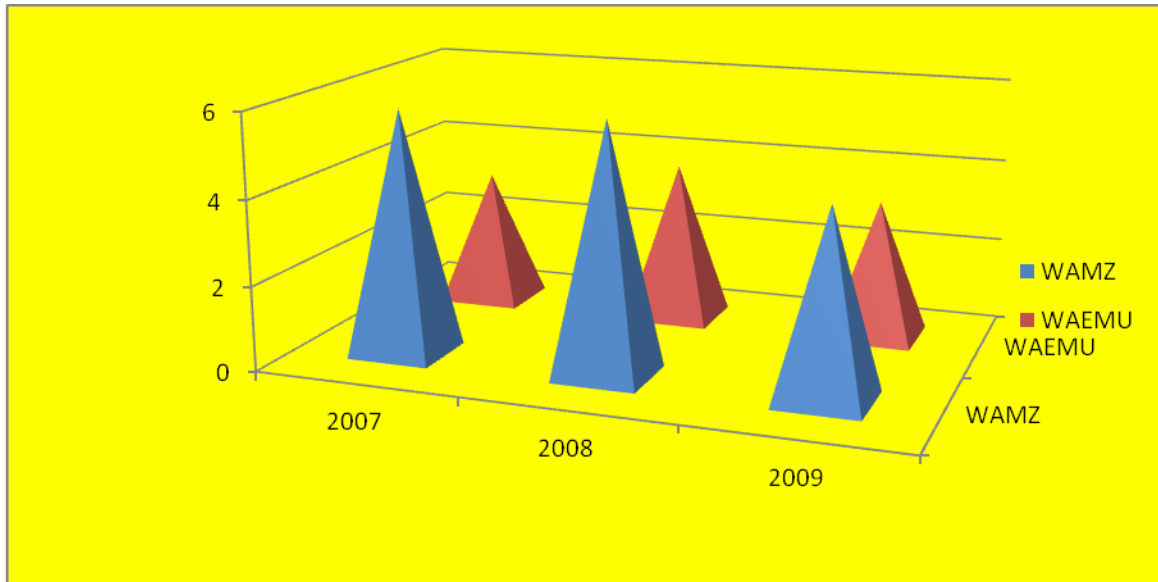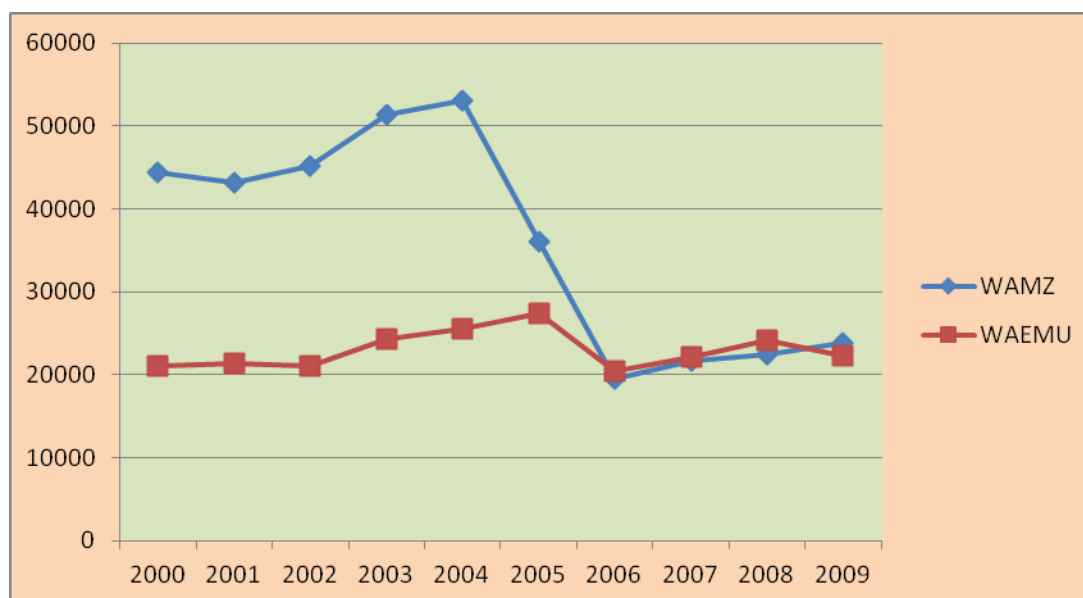
iii. Ratio of Debt to GDP %
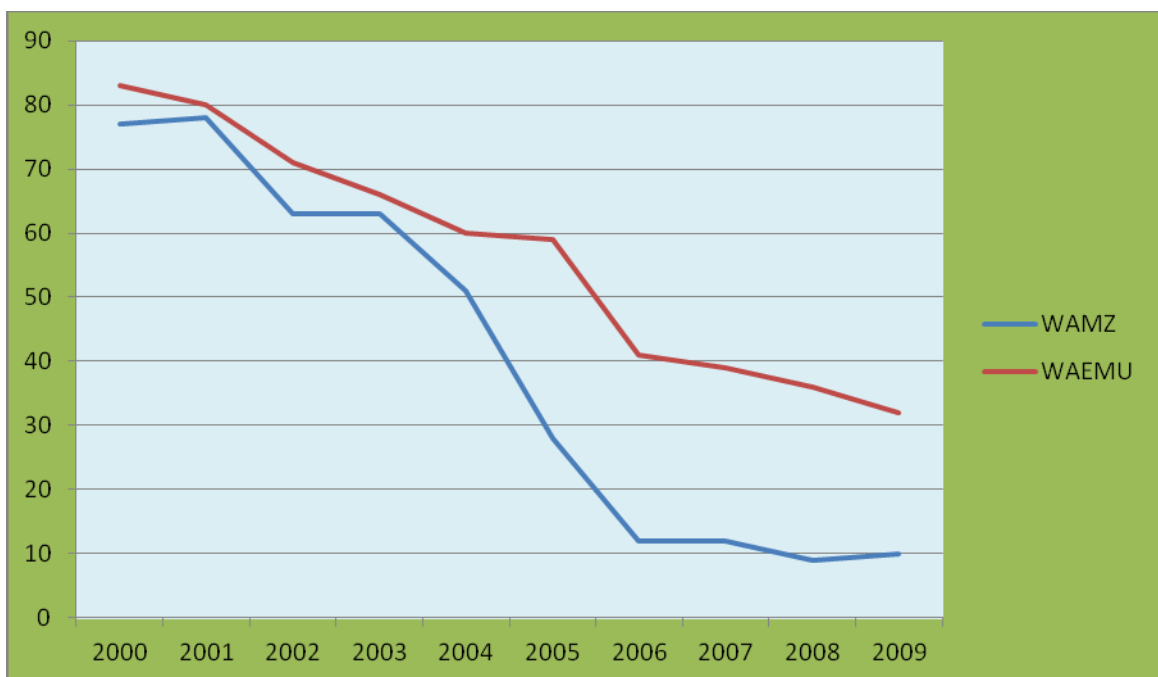
iv. External Debt (Millions of US Dollars)

Source: ECOWAS, IMF, MDAI

v. Budget deficit (excluding grants) 1999 figure

Country	%	Country	%
Benin	-1.1	Gambia	-5.9
B/Fasso	-12.6	Ghana	-8.2
Cape Verde	-13.8	Guinea	-5.0
C/D'Ivoire	-3.7	Nigeria	-8.4
G/Bissau	-12.9	S/Leone	-14.7
Mali	-8.9		
Niger	-7.9		
Senegal	-3.5		
Regional Total	-64.4		-42.2
Regional Averag	**-8.05**		**-8.44**

cxxx

A closer look at these figures, one will agree that the difference in major economic barometers of the two regions bear close semblance, especially if we go further to compare per capita GDP, corruption index which is 74% average in 2007 for WAMZ 5 nations and 73% for WAEMU 9 nations and percentage of population living below poverty line which was 55.4% for WAMZ 5 nations in 2009 and 53% for WAEMU 8 nations as shown before in tables 4.24 and 4.25.

Chapter 5

Summary of Findings and Discussion of Results

5.1 Introduction

The purpose of this research is to find out whether the proposal to set up a second monetary zone by five nations in west Africa, Gambia, Ghana, Guinea, Nigeria and Sierra Leone, will be feasible according to both the recommendations of optimum currency areas theory (OCA) and other comparative economic indicators.

According to Mundel (1961) group of nations can share a single currency and minimize the incidence of both symmetric and asymmetric shocks if wages are flexible, mobility of Labour is perfect and key economic indicators tended to converge towards a regional bench mark.

5.2 Summary of Findings

About 11 research questions were proposed, some were posited as hypotheseis.

The data collected has been analysed and the following are the findings

(a) The mean regional average performance of the 5 nations according to the requirements of the primary convergence criteria for 10 years was compared with the regional bench marks. The result of the hypothesis showed that the recorded average performance according to figures released by WAMI differs significantly with the bench mark.

It means that if we consider the 5 nations as a single nation, on average the good performance of a strong nation should cancel out the bad performance of a weak nation.

But for a period of 10 years since the decision to adhere to the convergence criteria was made, various convergence targets was not achieved as a regional block.

(b) Individual nations performance on primary criteria for the same 10 year period was also compared with the regional requirements using figures from same source

The result of the hypothesis showed that the convergence bench mark was not achieved by all the 5 nations even after 10 years period

(c) Figures collected on primary convergence criteria performance for two 4 year periods 2001 to 2004 and 2005 to 2008 was used to test if there is evidence of progress towards convergence.

The result of posited hypothesis of research question number 3, showed evidence of convergence, which was confirmed by tables 4.4 in chapter 4. The result further showed that if the average rate of progress is maintained, it will take 8 more years to fulfill all the primary convergence criteria.

(d) However, the result of tables 4.10 and figures 4.1 showed that this progress is not steady according to figures for ten years performance released by WAMI.

Over the years, nations differ in their performances, without a guarantee that nations that performed better this year will maintain same next year.

(e)　The result of awareness poll, (table 4.10) showed that the awareness among the citizens is still very poor, indicating that citizens who may bear future austerity are not aware of the move by their Governments to embrace a regional currency.

(f)In contrast, the awareness poll for EU (table 4.11) before the eve of the EMU showed that more than 50% of the citizens supported the monetary union.

(g)　Yet the result of hypothesis 6 showed that not all EU member nations fulfilled all the Maastricht convergence criteria before the commencement of EMU in 1999.

(h)　Therefore WAMI can embark on a single independent currency without fulfilling all the convergence criteria, but can such a currency be sustained in the long run?

Compared with figures from the EU and recently china, which recently floated her currency, according to tables, and figures   shown in research questions numbers 7 and 8 of chapter 4, evidence indicates that WAMI as a region performed poorly in all the indicators that sustains and

gives free currency long term stability, such as low inflation, high GPD, High Foreign Reserves, Low unemployment, a disciplined budgetary management, Strong Industrial Base, and very low public corruption.

(b) Finally, figures over the years as shown by tables, figures and pictures that answered research question 11, indicates that economic performances of EU and WAEMU both shows that there is no significant advantage EUs economy has over the non EU members especially Britain. WAEMU economy is not significantly superior to non WAEMU nations' economies. See comparative graphs of figure 4.13.

(c)   Discussion of Results

1. The result of literature review shows that modern empirical conclusions on the subject of monetary union is concentrated on the results of shocking studies based on optimum currency areas theory, using econometric vector auto regression models. The idea is that nations exposed to similar asymmetric and symmetric shocks

and synchronized fiscal policies, are good candidates for monetary union. Most of the studies were based on correlations of output growth and price differentials, inflationary money growth, aggregate demand, supply and nominal exchange rate volatility. The outcome for WAMZ generally returns a verdict of low correlation and non-viability. The same standard econometric techniques returned the same verdict for EU who decided to commence EMU in defiance. Critics of this technique prefer the dynamic factor approach or the augmented OCA model with fiscal distortions and such other models that recognize changes in structures due to changes in policy regimes. This work recognizes these theoretical limitations and chose to draw conclusions on the basis of time series comparative performances, using standard statistical parameters. In this way, it was possible to link poor performance in these economies to high index of public corruption compared to the high performances of EU nations with

low corruption index. This particular finding was not recognized by the various shocking models based on VAR and OLS.

2. Another important finding is the discovery of low awareness among the citizens which is very essential because the citizens will bear the weight of austerity if something goes wrong through increased taxes and reduced welfare activities.

3. If the economic indices of EU or China are a reference for WAMZ, then evidence shows that the gap between EU, China and WAMZ is too wide in all sectors. Without a strong economic base, it will be hard to maintain and support an independent currency.

4. Another important discovery is that high incidence of corruption is positively related to poverty and poverty is related to poor economic performance. Income is a circular flow, if it leaks out of the cycle, the whole economy will be affected via a multiplier wave. If we look at tables 4.19, 4.20, 4.22, 4.23, 4.25, we will

discover that this relationship is very strong and pronounced, especially when we consider the pathetic cases of Greece, Italy, Spain, Portugal and the rest of West African nations with high corruption index.

5. Finally, analysis of time series figures from both EU and WAEMU does not seem to support the assertion that monetary unions carry undue advantages. If we examine figure 4.27 of research question 11 in chapter 4, we will discover that out of 10 points considered, UK economy alone performed better in 6 points compared to the EU average performance. In ECOWAS region, that of WAEMU is not better either.

6. If we consider also figure 4.13 on WAEMU vs WAMZ statistics, research question 11, one will discover that except in the area of monetary management, WAMZ performed better in terms of GDP annual growth rate, ratio of debt to GDP and external debt, with average fiscal deficit running shoulder to shoulder. The reader can also consider the closeness of figures on both

corruption and poverty rating for the two regions, according to tables 4.24 and 4.25. These facts seriously challenge the proponents of monetary unions.

Chapter 6

Conclusions and Recommendations

6.1 Introduction

As much as possible, I have avoided the use of so called modern econometric regression models currently in vogue among monetary economists because of its numerous assumptions and the conflicting results that may result from faulty interpretation, especially when many researchers seem to be more disposed to those models that will produce a convergent tendency because independent fiscal, monetary and exchange rate regimes seems to have failed the convergence test in the case of WAMZ, instead I relied on the traditional statistical comparative figures which I considered will give better results and understanding for the purpose of the topic under study.

6.2 Conclusions

In course of this study, I have looked at the case of WAMZ proposed second monetary zone from various angles and made the following conclusions which are strictly scientific and based

on practical evidence as adduced from the statistical figures examined.

a. After 10 years of the agreement to work towards establishing a second monetary zone the average performance of the zone towards fulfilling the convergence criteria is still less than the expected regional bench mark.

b. Viewed from country basis, the performances of many nations are poor.

c. Fulfillments are uncertain, because some nations can fulfill particular criteria in a year and fail to fulfill same in another year.

d. China recently floated her currency –the Yuan with excellent economic indices. The economy of WAMZ is still far behind these figures.

e. Comparative statistics with EU, who is currently enjoying the status of monetary union, shows that wide gaps still exists between the economic indices of the two regions.

f. The average economic performances of EU since 10 years of EMU shows that the expected benefits accruable from largeness, is not yet evident.

g. WAEMU, the Franco-phone West Africa, has enjoyed the benefits of monetary union for over 45 years, yet economic statistics from the region seems to fall short of that of WAMZ-the English speaking aspect of the region who operate hitherto, at individual nations level.

h. Corruption (official, financial etc) is highly related to poor economic performance.

6.3 Recommendations

a) A Long Term Goal

The problems confronting the nations that make up WAMZ are numerous; the idea of monetary union can only be considered when some of these problems are solved.

China waited for over 50 years before deciding to float her currency, the Yuan. In my opinion, the idea of monetary union must wait for the next 30 years or so, because the

present problems are not superficial, but fundamental, requiring time, strong focus and determination.

Since the result of this work seems to indicate that monetary unions carries no undue advantages, nations intending to rush into such unions should better study the statistics emanating from present unions.

b) EUs Conflicting Signal

Data used in this research interestingly revealed that over the years, the economic performance of EU as a body is declining since year 2000, or after the formation of EMU.

The GDP witnessed a decline in its relative growth rate, leading to a continuous declining tendency in EUs share of world total GDP. Other figures did not speak better either.

Inflation rate is growing, Industrial productivity is declining and unemployment rate is worsening, all are tell-tale signs of a sick and struggling region.

Therefore, time is needed not only to strengthen the industrial economy of WAMZ nations, but to wait out the EUs

unfolding drama, whose outcome will determine whether future monetary unions will be encouraged or discouraged.

Nations like Greece, Portugal, and Ireland have applied to EU Central Bank for help from the stabilization fund, but the conditionality of such help does not go down well with the citizens

a. Reduce total public Labour

b. Reduce Wage Bill

c. Reduce Subsidy

d. Reduce Social Security Responsibility

e. Increase Specific or General Taxes

f. Improve productivity and Reduce Losses and corruption in Public and financial Institutions

All these measures are directed at the citizens, who are expected to bear the burden with patriotic equanimity just for Europe to succeed in their unitary experiment. But, unfortunately, these recommendations cannot be of much help in the long run because, the resultant reduction in economic activities will affect both demand and investment, making it impossible to pay back

the money borrowed without resorting to another round of deficit budget. If more nations like Spain and Italy, apply for help, the intervention fund may be exhausted and it will create an emergency situation should another nation go under. If strong nations become reluctant to continue rendering help to weak nations, EU will collapse which is the likely scenario before the year 2020. The major villain is corruption in both Government and financial institutions.

c) **Lessons from EU for WAMZ Proposal**

The verdict for EU is that it may not survive for long because some member nations have weak and insolvent economies, unless memberships of such nations are revoked or EU decides to collapse their borders and become one nation.

The economies of almost all the WAMZ nations are weak, running high in fiscal deficits. The reserve fund of the entire ECOWAS central bank is supposed to be only $ 50 billion, many nations have not contributed their quota due to poverty and the said sum may in reality not be there. Therefore, no nation or group of nations stands out to bear a

greater proportion of the regions burden like Germany, France, Luxemburg, etc in EU.

To rescue a sinking nation, the same prescription as in EU will be prescribed, (product of IMF) but in the short period, developing nations (regions) need economic stimulus as measures to stimulate such areas as

a. Consumption

b. Savings

c. Investment

d. Employment, etc

Reducing expenditures through reducing wages, social security, subsidies, and increasing tax rates, aimed at balancing budgets, may actually lead to the collapse of any developing economy. For such economy, budget deficits, inflation and high debt ratio is an indication that such nation is addressing her developmental needs massively, provided that such expenditures are not embezzled which is usually the case. Therefore ECOWAS nations should concentrate in the immediate structures necessary for solid

economic base rather than seek for economic convergence which should be a policy for growing and not developing economy.

d)   Results of Comparative Statistics

All the comparism made between EU and WAMZ, showed a wide gap in the average statistical ratios of the two regions. The outcome indicates that most EU nations have strong economies with strong pool of reserves; this region can attempt a monetary union, but ensure that weak nations are excluded. In WAMZ and indeed ECOWAS, such a union should not be attempted, because given the signal of poverty everywhere, reserves are low, and citizens are poorly paid to withstand inevitable austerities that may follow various rescue efforts occasioned by notorious fiscal indiscipline. Prospect of financial help from within the region will be very low and the IMF will be reluctant to help when they know that the probability of paying back such economic rescue loan is low in an underdeveloped and corrupt economy.

e) Strengthening of Democratic Values and Economic Openness

Presently, there exists little or no democracy in all the nations that are aspiring for the currency union.

In the absence of true democracy, cheating and noncompliance to regional rules will be common and the survival of a currency union is related to seriousness and obedience to all the rules governing its existence.

It is the strength of democracy and openness that guarantees civil justice, transparency and rule of law, thus ensuring that wrong leaders are removed during elections and right ones elected, corruption will be reduced and monies voted for projects will be well utilized. But the persistent post-election protests and litigations in such nations like Ghana, Guinea, Sierra Leone and Nigeria shows that true democracy has not been entrenched in these nations.

f}State or Market Driven Economy.

Greater percentage of wealth of this region are appropriated by the Central Government through undemocratic constitutions which gives government the right over major wealth resources (minerals, exportable commodities etc.) of the nations and the right to determine how it will be shared among the rest tiers of government, while retaining the greatest percentage.

Most often, this money is either stolen, squandered or frittered away in numerous white elephant abandoned projects that bear little or no economic significance to the priority needs of the nation.

To whom much is given, much is expected; the huge resources at the disposal of government must move her to shoulder the greatest responsibility of development in these nations.

The government must take the initiative not only to invest in basic sectors of the economy, but be ready to stimulate

the private sector or fill their gap when they fail to respond adequately.

Alternatively, the role (wealth) of government can be reduced through appropriate legislation and pure market economy permitted to pilot the rate of economic progress. All wealth will be managed by their owners, while government collects minimum taxes and uses it to moderate the system and guarantee security of property.

g) Corruption is a Monster and an agent of Poverty.

The research identified official and financial corruption as the major agent of poverty and low performance in the region. It is corruption that enthrones bad government, bad law enforcement, bad judiciary and bad society where nothing seems to work, leading to the glorification of inefficiency and poverty.

Poverty in choice of leadership leads to poverty in policy formulation, recommendation and implementation. The poverty cycle ends up in affecting both the emotional, physical and mental values of the citizens.

The solution to corruption can be found in producing a people's constitution, not self-serving documents produced by dictators, or insensate power mongers who cling to power at all costs without considering the progressive decay in the economy they were presiding through various crooked means.

h) A Home Grown Developmental Strategy

Since the survival of a monetary Union depends very much on the strength of the combined economy of intending nations and the volume of accumulated sovereign wealth, which, in times of crisis, becomes a handy hedge to reduce the harmful effects of symmetric and asymmetric shocks. Poor nations displaying the type of discouraging statistics in almost all sectors as was shown in this research, must first seek to attain a level of self-sustaining growth, through:

(i)   A conscious desire for such an economy by the citizens.

(ii) Eradication of corruption by both amending and enhancing the constitution.

(iii) Mandating the central Government, who controls greater percentage of the wealth in these nations, to deliberately commence the policy of using her huge share of the nation's wealth to build diverse industrial units and sell them to private investors at discounts, with appropriate "after sales management support."

(iv) In the final phase, reduce the role of Government to maintenance of law and order and the guarantor of citizen's rights in an enhanced environment of private competition.

In the final analysis and with self-sustaining growth achieved in each nation, all round economic convergence will become an easy possibility and with it also, the ability to absorb and manage shocks.

This is because by then, the resource allocating mechanism has been perfected, the industrial base strong and elastic, a period of low inflation, high productivity and creative innovations, all at the cost of a little patience and conscious desire to excel on the part

of the leadership and citizenry, **for now**, **the idea of economic union in ECOWAS region should be stepped down unless such a union can proceed beyond the economic to the political where national boundaries collapse, leaving one nation, one leader, one burden and one destiny in a confederation of West African States.**

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5. Report for Selected Countries and Subjects

You will find notes on the data and options to download the table below your results.

	Units	Scale	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	U.S. dollars	Billions	193.516	188.390	201.638	238.550	234.234	207.126	212.439	211.207	191.761	190.319	206.684	252.516	289.419	303.447
	U.S. dollars	Units	24,680.904	23,830.106	25,407.628	30,012.696	29,429.959	25,994.610	26,632.125	26,426.200	23,935.535	23,664.724	25,572.988	31,104.803	35,426.972	36,892.024
rity (PPP) per capita GDP	Current international dollar	Units	20,773.864	21,137.558	21,975.599	22,967.741	23,894.807	24,805.418	25,958.994	27,167.862	28,700.284	29,388.632	30,206.872	30,966.006	32,290.865	33,897.444
rity (PPP) share of world total	Percent		0.584	0.575	0.570	0.564	0.556	0.545	0.551	0.550	0.544	0.535	0.529	0.515	0.501	0.492
	Percent of GDP		24.657	23.778	24.404	24.826	24.737	24.875	24.771	24.708	24.482	23.716	22.058	22.930	22.721	22.543
	Index		87.368	90.088	92.264	93.352	95.256	96.272	96.808	97.915	100.000	101.998	103.707	104.969	107.496	109.397
	Percent of total labor force		3.290	3.958	3.850	3.917	4.333	4.367	4.483	3.933	3.600	3.600	4.200	4.300	4.900	5.200
	Percent of potential GDP		-2.596	-3.629	-4.552	-5.559	-3.963	-1.890	-2.451	-2.921	-3.788	-0.997	-0.933	-0.783	-1.616	-1.651
	U.S. dollars	Billions	-0.683	-1.433	-3.280	-6.816	-6.651	-5.030	-3.396	-3.451	-1.414	-1.569	5.545	4.278	6.408	6.614
	U.S. dollars	Billions	231.791	222.256	242.621	284.786	275.172	249.758	255.566	254.381	233.139	232.341	253.294	311.697	360.976	377.774
	U.S. dollars	Units	23,052.224	22,018.453	23,959.921	28,077.110	27,057.217	24,505.341	25,021.149	24,844.323	22,716.455	22,535.481	24,461.049	29,982.375	34,556.381	35,940.820
rity (PPP) per capita GDP	Current international dollar	Units	19,373.200	19,588.028	20,593.785	21,885.525	22,489.171	23,729.853	24,405.488	25,575.743	27,057.831	27,739.319	28,447.733	29,172.522	30,687.019	32,099.518
rity (PPP) share of world total	Percent		0.699	0.680	0.681	0.686	0.669	0.667	0.663	0.664	0.657	0.648	0.638	0.621	0.609	0.595
	Percent of GDP		20.583	20.304	20.342	19.460	20.429	20.905	21.109	21.282	22.553	21.049	19.106	19.257	20.672	21.796
	Index		79.530	81.490	83.110	84.130	85.930	86.690	87.290	89.080	91.720	93.510	94.710	96.330	98.200	100.930
	Percent of total labor force		7.100	8.600	9.800	9.700	9.500	9.200	9.300	8.500	6.900	6.600	7.500	8.200	8.400	8.500
	Percent of potential GDP		-9.003	-6.421	-4.549	-3.963	-3.442	-2.691	-0.695	-1.103	-1.116	-0.800	-0.696	-1.085	-1.602	-1.201
	U.S. dollars	Billions	6.664	11.251	12.600	15.391	13.836	13.842	13.255	20.070	9.393	7.896	11.342	10.672	11.508	7.471
	U.S. dollars	Billions	110.717	87.386	100.988	130.846	128.275	123.068	129.839	130.388	122.073	124.669	135.563	164.440	189.166	195.966
	U.S. dollars	Units	21,902.555	17,209.101	19,806.456	25,571.650	24,993.619	23,909.005	25,164.251	25,213.823	23,561.049	23,998.335	26,038.262	31,503.612	36,123.791	37,287.223
rity (PPP) per capita GDP	Current international dollar	Units	16,005.624	16,154.779	17,021.809	18,001.318	18,944.353	20,415.121	21,630.410	22,753.728	24,441.886	25,497.613	26,324.600	27,358.804	29,142.456	30,435.552
rity (PPP) share of world total	Percent		0.290	0.282	0.284	0.285	0.284	0.290	0.297	0.298	0.300	0.300	0.297	0.293	0.290	0.282
	Percent of GDP		18.780	16.321	17.515	18.205	17.789	19.186	20.380	19.574	20.878	20.485	19.160	19.432	20.007	21.864
	Index		82.596	85.041	86.350	86.001	87.490	88.880	89.580	91.590	94.210	96.390	98.050	99.270	99.360	100.410
	Percent of total labor force		11.725	16.357	16.606	15.397	14.578	12.641	11.364	10.200	9.811	9.136	9.119	9.038	8.828	8.359
	Percent of potential GDP		-1.823	-2.849	-2.724	-3.305	-1.289	-1.348	0.900	0.987	5.741	4.456	4.080	2.687	1.704	2.143
	U.S. dollars	Billions	-5.117	-1.126	1.099	5.356	5.148	6.856	7.292	6.971	9.499	10.421	11.476	7.945	11.734	6.568
	U.S. dollars	Billions	1,374.072	1,292.117	1,366.163	1,572.382	1,574.319	1,425.800	1,474.237	1,458.365	1,333.281	1,341.249	1,463.458	1,804.412	2,060.576	2,147.783
	U.S. dollars	Units	24,005.515	22,484.472	23,693.931	27,183.029	27,131.266	24,495.124	25,244.733	24,853.949	22,574.114	22,551.003	24,434.183	29,922.107	33,927.699	35,105.098
rity (PPP) per capita GDP	Current international dollar	Units	19,458.092	19,647.476	20,428.651	21,254.695	21,820.727	22,623.446	23,613.868	24,607.445	25,995.295	26,865.852	27,399.197	28,098.295	29,249.986	30,546.332
rity (PPP) share of world total	Percent		3.996	3.884	3.848	3.799	3.704	3.629	3.668	3.659	3.634	3.618	3.557	3.472	3.374	3.295
	Percent of GDP		19.901	17.433	18.394	18.593	17.675	17.417	18.697	19.272	20.433	20.095	19.022	18.872	19.484	20.323
	Index		80.206	81.866	83.069	84.873	86.643	87.754	88.340	88.837	90.460	92.071	93.855	95.891	98.137	100.001
	Percent of total labor force		9.850	11.117	11.683	11.150	11.583	11.542	11.067	10.458	9.083	8.392	8.908	8.975	9.233	9.258
	Percent of potential GDP		-4.864	-5.084	-4.330	-4.649	-2.527	-2.199	-2.553	-2.262	-2.784	-2.628	-3.481	-4.006	-3.560	-3.341
	U.S. dollars	Billions	3.835	9.188	7.406	7.338	19.361	37.813	38.555	45.891	19.317	23.522	18.164	12.984	11.141	-10.375
	U.S. dollars	Billions	2,066.729	2,005.557	2,151.025	2,524.949	2,439.346	2,163.233	2,187.484	2,146.432	1,905.795	1,892.595	2,024.060	2,446.885	2,748.821	2,793.232
	U.S. dollars	Units	25,703.341	24,795.781	26,458.849	30,934.663	29,807.013	26,395.703	26,675.983	26,166.430	23,220.161	23,039.410	24,590.610	29,697.867	33,366.364	33,922.401
rity (PPP) per capita GDP	Current international dollar	Units	20,236.207	20,395.301	21,276.669	22,060.328	22,653.854	23,447.018	24,129.717	24,935.529	26,345.105	27,284.376	27,675.770	28,176.336	29,322.547	30,508.124
rity (PPP) share of world total	Percent		5.851	5.689	5.662	5.571	5.428	5.297	5.275	5.204	5.125	5.075	4.936	4.757	4.587	4.429
	Percent of GDP		23.389	22.169	22.472	22.222	21.110	21.112	21.609	21.487	21.778	19.490	17.273	17.396	17.143	16.873

	Index		80.989	84.406	86.516	87.822	89.000	90.200	90.400	91.600	93.600	94.900	96.000	97.000	99.200	101.300
	Percent of total labor force		6.342	7.617	8.208	8.000	8.667	9.375	9.050	8.267	7.525	7.617	8.358	9.308	9.775	10.617
	Percent of potential GDP		n/a	n/a	n/a	-2.666	-2.488	-2.113	-1.821	-1.349	-1.618	-2.715	-3.030	-3.073	-3.243	-2.647
	U.S. dollars	Billions	-22.742	-19.033	-30.520	-29.587	-14.017	-10.010	-16.330	-26.859	-32.558	0.380	40.584	46.270	127.852	142.801
	U.S. dollars	Billions	109.556	102.608	109.824	128.895	136.273	133.128	133.869	137.829	127.604	131.144	147.910	194.990	230.342	242.696
	U.S. dollars	Units	10,581.015	9,802.050	10,383.311	12,077.843	12,676.581	12,311.890	12,323.375	12,639.031	11,661.884	11,950.439	13,446.398	17,692.570	20,860.490	21,935.687
rity (PPP) per capita GDP	Current international dollar	Units	14,121.136	14,047.527	14,479.629	14,957.275	15,488.391	16,240.011	16,897.782	17,664.441	18,790.967	19,963.787	20,935.183	22,613.501	24,059.279	25,076.081
rity (PPP) share of world total	Percent		0.525	0.506	0.500	0.493	0.487	0.484	0.488	0.488	0.487	0.496	0.499	0.511	0.506	0.490
	Percent of GDP		20.441	19.325	18.092	17.842	18.653	19.094	20.495	22.307	23.318	23.205	22.308	24.476	22.507	19.747
	Index		52.471	58.790	65.109	70.300	75.150	78.570	81.480	83.370	86.420	89.470	92.600	95.510	98.490	101.900
	Percent of total labor force		8.368	9.339	9.299	9.071	9.804	9.767	11.200	12.125	11.350	10.750	10.325	9.725	10.492	9.900
	Percent of potential GDP		-12.192	-11.657	-8.369	-5.950	-5.561	-5.014	-2.866	-1.898	-2.681	-3.660	-4.064	-6.141	-8.730	-6.387
	U.S. dollars	Billions	-2.140	-0.747	-0.146	-2.864	-4.554	-4.860	-3.682	-7.295	-9.820	-9.400	-9.582	-12.804	-13.476	-17.874
	U.S. dollars	Billions	54.435	50.439	55.347	67.125	74.087	81.290	88.117	96.419	97.039	104.910	123.213	158.325	185.680	202.203
	U.S. dollars	Units	15,314.365	14,112.473	15,434.630	18,639.104	20,431.519	22,184.235	23,795.566	25,769.393	25,607.312	27,269.114	31,454.279	39,781.124	45,901.319	48,914.673
rity (PPP) per capita GDP	Current international dollar	Units	14,359.691	14,934.187	16,094.573	17,641.348	19,305.689	21,675.146	23,520.024	26,193.052	28,975.465	30,849.872	32,804.640	34,437.969	36,281.346	38,390.631
rity (PPP) share of world total	Percent		0.183	0.184	0.189	0.196	0.205	0.219	0.232	0.248	0.260	0.269	0.279	0.281	0.279	0.280
	Percent of GDP		16.043	14.922	15.944	18.173	19.651	21.383	23.304	23.689	23.973	22.742	22.097	23.366	24.721	27.163
	Index		n/a	n/a	n/a	n/a	76.600	77.400	79.100	82.200	86.000	89.700	93.800	96.600	98.900	100.800
	Percent of total labor force		15.100	15.700	14.700	12.200	11.900	10.300	7.594	5.564	4.260	3.865	4.402	4.653	4.500	4.375
	Percent of potential GDP		-4.785	-3.355	-3.830	-3.686	-2.770	1.507	1.219	0.269	1.673	-1.800	-2.757	-3.167	-2.750	-3.756
	U.S. dollars	Billions	0.393	2.005	1.764	2.149	2.584	2.696	0.704	0.241	-0.350	-0.678	-1.223	-0.002	-1.078	-7.088
	U.S. dollars	Billions	1,271.907	1,022.662	1,054.897	1,126.631	1,259.947	1,193.617	1,218.666	1,202.398	1,100.563	1,118.318	1,223.236	1,510.055	1,730.095	1,780.781
	U.S. dollars	Units	22,403.304	17,997.611	18,557.950	19,819.031	22,164.101	20,985.088	21,416.038	21,128.392	19,334.059	19,633.160	21,462.637	26,343.798	29,886.815	30,460.292
rity (PPP) per capita GDP	Current international dollar	Units	18,571.442	18,796.967	19,598.715	20,571.659	21,192.908	21,958.098	22,507.432	23,171.062	24,540.767	25,534.829	26,050.969	26,455.414	27,222.028	27,944.059
rity (PPP) share of world total	Percent		3.782	3.674	3.639	3.614	3.524	3.442	3.407	3.342	3.307	3.294	3.218	3.107	2.993	2.880
	Percent of GDP		21.426	18.867	18.745	19.835	19.167	19.358	19.621	20.061	20.695	20.580	21.130	20.668	20.799	20.690
	Index		69.915	73.022	75.966	80.300	82.600	84.100	85.500	87.300	89.700	91.700	94.400	96.800	99.100	101.200
	Percent of total labor force		8.808	9.833	10.633	11.150	11.150	11.242	11.333	10.942	10.100	9.100	8.608	8.450	8.017	7.683
	Percent of potential GDP		-10.490	-8.768	-7.951	-7.241	-6.490	-2.368	-2.460	-1.375	-2.795	-4.200	-4.193	-5.030	-4.767	-4.626
	U.S. dollars	Billions	-34.125	11.908	13.907	23.182	40.185	33.769	19.791	8.208	-5.863	-0.639	-9.483	-19.605	-16.208	-29.448
	U.S. dollars	Billions	15.421	15.810	17.594	20.696	20.588	18.540	19.380	21.216	20.329	20.216	22.659	29.214	34.136	37.725
	U.S. dollars	Units	39,298.541	39,723.147	43,570.223	50,638.957	49,742.602	44,216.281	45,642.578	49,281.164	46,594.158	45,810.738	50,793.069	64,704.622	74,565.389	81,163.029
rity (PPP) per capita GDP	Current international dollar	Units	36,095.936	37,902.355	39,602.701	40,515.058	41,386.721	44,044.103	46,840.314	50,824.198	55,559.988	57,585.475	60,264.635	61,767.203	65,750.863	70,628.502
rity (PPP) share of world total	Percent		0.051	0.052	0.052	0.051	0.050	0.051	0.053	0.055	0.057	0.058	0.058	0.057	0.057	0.058
	Percent of GDP		22.028	22.193	20.994	19.605	20.190	22.240	23.336	23.944	23.154	24.429	22.029	22.168	21.768	22.536
	Index		86.948	90.085	91.710	92.864	94.343	95.732	96.113	98.392	101.805	103.559	105.870	108.055	110.386	113.120
	Percent of total labor force		1.634	2.105	2.732	2.961	3.241	3.302	3.057	2.890	2.500	2.300	2.600	3.500	3.900	4.300
	U.S. dollars	Billions	n/a	n/a	n/a	2.473	2.367	1.839	1.648	2.272	2.688	1.770	2.386	2.378	4.046	4.353
	U.S. dollars	Billions	336.948	327.680	351.982	419.348	418.106	387.013	403.202	411.997	386.204	400.998	439.357	539.343	610.691	639.579
	U.S. dollars	Units	22,271.448	21,502.460	22,943.063	27,187.799	26,985.214	24,860.923	25,756.792	26,141.542	24,249.912	24,990.548	27,206.454	33,241.450	37,507.131	39,189.910
rity (PPP) per capita GDP	Current international dollar	Units	20,773.584	21,216.511	22,135.461	23,157.291	24,292.181	25,657.474	26,815.384	28,292.902	29,731.838	30,757.321	31,079.667	31,706.149	33,110.403	35,020.991
rity (PPP) share of world total	Percent		1.127	1.112	1.109	1.104	1.101	1.101	1.117	1.130	1.121	1.118	1.088	1.054	1.024	1.008
	Percent of GDP		22.567	20.578	20.817	21.022	21.698	22.259	22.753	22.862	22.031	21.484	19.687	19.308	18.984	19.013
	Index		74.539	76.486	78.502	79.228	80.757	82.526	83.733	85.341	87.831	92.341	95.311	96.841	98.051	100.061
	Percent of total labor force		5.325	6.233	6.775	6.567	5.958	4.933	3.825	3.233	2.833	2.242	2.758	3.692	4.575	4.700
	Percent of potential GDP		-4.107	-0.594	-0.781	-7.977	-1.138	-1.268	-1.664	-1.002	0.378	-2.004	-2.384	-2.208	-0.899	0.352
	U.S. dollars	Billions	6.900	13.273	17.312	25.793	21.412	25.073	12.970	15.643	7.251	9.770	10.939	29.941	46.636	47.384
	U.S. dollars	Billions	106.340	93.574	98.051	116.237	121.010	115.666	122.732	126.279	117.358	120.136	132.353	161.725	185.037	191.508
	U.S. dollars	Units	10,671.014	9,381.230	9,814.382	11,603.350	12,049.013	11,483.274	12,139.982	12,442.632	11,511.273	11,712.982	12,813.314	15,539.323	17,665.207	18,188.174
rity (PPP) per capita GDP	Current international dollar	Units	12,775.084	12,955.527	13,404.012	13,961.240	14,704.338	15,574.213	16,484.688	17,342.016	18,329.757	18,997.644	19,305.618	19,390.884	20,017.354	20,638.976
rity (PPP) share of world total	Percent		0.457	0.445	0.437	0.432	0.432	0.432	0.443	0.446	0.442	0.441	0.432	0.414	0.398	0.383
	Percent of GDP		27.063	23.791	24.543	23.835	24.242	26.287	28.177	28.784	28.499	27.785	25.819	23.564	24.062	23.630
	Index		67.350	71.330	74.092	76.606	78.670	80.310	82.570	83.980	87.180	90.620	94.210	96.400	98.900	101.400
	Percent of total labor force		3.860	5.127	6.340	7.200	7.250	6.733	5.000	4.467	3.983	4.042	5.083	6.367	6.750	7.725
	Percent of potential GDP		-6.735	-7.808	-6.320	-3.712	-4.113	-3.120	-3.341	-2.909	-3.946	-4.685	-4.299	-4.492	-5.024	-5.563

	U.S. dollars	Billions	-0.184	0.233	-2.196	-0.132	-4.803	-6.719	-8.806	-11.001	-12.167	-12.430	-10.931	-10.438	-15.457	-19.838
	U.S. dollars	Billions	613.016	514.949	516.718	597.278	622.650	573.376	601.625	618.691	582.377	609.631	688.676	885.358	1,045.671	1,132.132
	U.S. dollars	Units	15,691.092	13,139.996	13,149.720	15,164.355	15,772.026	14,485.628	15,146.230	15,495.845	14,464.242	14,971.129	16,811.640	21,250.095	24,693.885	26,305.387
rity (PPP) per capita GDP	Current international dollar	Units	15,463.887	15,549.492	16,204.160	17,183.325	17,893.137	18,863.079	19,859.072	20,999.019	22,349.063	23,421.019	24,298.292	25,160.702	26,228.084	27,508.771
rity (PPP) share of world total	Percent		2.167	2.096	2.080	2.091	2.066	2.058	2.098	2.125	2.130	2.160	2.157	2.148	2.109	2.087
	Percent of GDP		22.901	20.902	20.820	21.897	21.705	22.064	23.453	25.122	26.278	26.354	26.630	27.384	28.275	29.481
	Index		66.795	70.085	73.124	76.283	78.780	80.260	81.350	83.610	86.960	89.140	92.730	95.220	98.340	102.000
	Percent of total labor force		18.353	22.640	24.118	22.900	22.080	20.610	18.605	15.640	13.873	10.553	11.475	11.480	10.970	9.160
	Percent of potential GDP		-5.192	-4.941	-5.115	-3.993	-2.315	-1.219	-1.735	-1.021	-1.122	-1.756	-1.119	-0.976	-0.978	-1.598
	U.S. dollars	Billions	-21.421	-5.533	-6.394	-1.835	-1.418	-0.510	-7.074	-18.100	-23.054	-24.023	-22.443	-31.071	-54.909	-83.291

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. Report for Selected Countries and Subjects

You will find notes on the data and options to download the table below your results.

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Country	Subject Descriptor	Units	Scale	Country/Series-specific Notes	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Benin	Gross domestic product, current prices	U.S. dollars	Billions	🛈	2.359	2.499	2.807	3.558	4.047	4.389	4.735	5.546	6.718	6.659	6.649
Benin	Gross domestic product per capita, current prices	U.S. dollars	Units	🛈	330.361	338.819	368.401	451.986	497.742	522.451	548.311	624.787	736.158	709.824	689.461
Benin	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units	🛈	1,050.623	1,104.480	1,134.769	1,166.503	1,194.803	1,254.987	1,307.930	1,370.623	1,430.892	1,442.145	1,450.988
Benin	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		🛈	0.018	0.018	0.019	0.019	0.018	0.019	0.018	0.018	0.019	0.019	0.019
Benin	Investment	Percent of GDP		🛈	19.255	19.183	17.995	19.131	18.541	18.620	17.179	20.505	19.990	23.257	18.739
Benin	Inflation, end of period consumer prices	Index		🛈	80.585	82.468	83.476	84.170	86.344	89.568	94.274	94.550	103.908	100.903	104.959
Benin	General government gross debt	Percent of GDP		🛈	60.388	60.006	47.796	37.211	35.124	42.879	14.590	20.900	26.695	28.082	30.589
Benin	Current account balance	U.S. dollars	Billions	🛈	-0.104	-0.109	-0.223	-0.333	-0.283	-0.275	-0.251	-0.560	-0.539	-0.590	-0.419
Burkina Faso	Gross domestic product, current prices	U.S. dollars	Billions	🛈	2.633	2.837	3.217	4.214	4.845	5.472	6.074	6.795	8.276	8.463	8.781
Burkina Faso	Gross domestic product per capita, current prices	U.S. dollars	Units	🛈	233.154	243.594	267.569	339.349	378.361	417.317	452.705	495.016	589.371	589.107	597.534

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Burkina Faso	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		886.067	936.701	962.121	1,025.792	1,000.188	1,097.455	1,168.505	1,217.601	1,279.384	1,302.991	1,360.407
Burkina Faso	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.0024	0.0025	0.0025	0.0026	0.0024	0.0025	0.0025	0.0025	0.0026	0.0027	0.0027
Burkina Faso	Investment	Percent of GDP			16.616	13.675	16.432	17.713	16.200	20.321	16.396	18.886	20.186	16.438	20.251
Burkina Faso	Inflation, end of period consumer prices	Index			108.492	109.478	113.786	117.388	118.199	123.485	125.372	128.214	143.065	142.640	144.652
Burkina Faso	General government gross debt	Percent of GDP			n/a	n/a	48.685	44.604	45.821	44.104	21.654	21.930	23.952	25.836	27.683
Burkina Faso	Current account balance	U.S. dollars	Billions		-0.320	-0.315	-0.328	-0.379	-0.532	-0.635	-0.554	-0.560	-0.949	-0.417	-0.373
Cameroon	Gross domestic product, current prices	U.S. dollars	Billions		10.046	9.497	10.888	13.630	15.784	16.593	17.957	20.433	23.732	22.189	22.478
Cameroon	Gross domestic product per capita, current prices	U.S. dollars	Units		655.490	602.812	662.985	807.331	909.429	930.009	979.045	1,083.718	1,224.377	1,113.591	1,100.603
Cameroon	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		1,722.807	1,791.109	1,816.091	1,877.405	1,943.571	1,953.664	2,025.585	2,097.041	2,137.811	2,139.570	2,170.379
Cameroon	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.0063	0.0064	0.0065	0.0065	0.0064	0.0061	0.0060	0.0059	0.0059	0.0061	0.0060
Cameroon	Investment	Percent of GDP			17.028	20.700	20.169	17.277	20.391	16.769	14.298	15.039	17.523	16.616	16.438
Cameroon	Inflation, end of period	Index			166	174	182	181	183	190	194	201	212	214	219

me roo n	consumer prices				.442	.431	.000	.900	.733	.100	.700	.400	.100	.100	.600
Cameroon	General government gross debt	Percent of GDP		i	96.059	84.936	61.123	59.541	61.402	51.824	15.724	11.925	9.546	9.639	12.861
Cameroon	Current account balance	U.S. dollars	Billions	i	-0.143	-0.338	-0.557	-0.242	-0.534	-0.565	0.280	0.282	-0.196	-0.830	-0.885
Côte d'Ivoire	Gross domestic product, current prices	U.S. dollars	Billions	i	10.448	10.554	11.527	13.764	15.501	16.392	17.383	19.824	23.508	22.496	22.823
Côte d'Ivoire	Gross domestic product per capita, current prices	U.S. dollars	Units	i	624.304	618.992	664.892	781.891	837.918	862.729	888.268	983.484	1,132.247	1,051.989	1,036.164
Côte d'Ivoire	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units	i	1,599.490	1,605.619	1,579.508	1,562.343	1,551.032	1,580.159	1,595.659	1,620.059	1,644.692	1,671.854	1,680.747
Côte d'Ivoire	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		i	0.063	0.062	0.059	0.056	0.054	0.053	0.051	0.049	0.049	0.051	0.050
Côte d'Ivoire	Investment	Percent of GDP		i	10.786	11.162	10.066	10.116	10.802	9.736	9.334	8.685	10.141	10.171	9.575
Côte d'Ivoire	Inflation, end of period consumer prices	Index		i	100.396	105.199	109.826	109.706	114.581	117.480	119.873	121.619	132.509	130.297	136.947
Côte d'Ivoire	General government gross debt	Percent of GDP		i	109.460	96.793	93.578	90.439	84.901	86.282	84.242	75.636	75.281	66.969	67.212
Côte d'Ivoire	Current account balance	U.S. dollars	Billions	i	-0.293	-0.060	0.771	0.295	0.241	0.039	0.480	-0.135	0.453	1.663	0.887

Country	Indicator	Units	Units											
Gabon	Gross domestic product, current prices	U.S. dollars	Billions		5.068	4.713	4.932	6.055	7.178	8.666	9.546	11.569	14.529	10.950	13.056
Gabon	Gross domestic product per capita, current prices	U.S. dollars	Units		4,204.439	3,814.760	3,894.275	4,664.626	5,395.245	6,354.497	6,829.241	8,074.505	9,993.287	7,423.856	8,724.231
Gabon	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		12,099.267	12,330.335	12,189.740	12,450.631	12,633.841	13,081.164	13,332.744	14,134.871	14,564.141	14,281.949	15,020.597
Gabon	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.035	0.034	0.033	0.033	0.032	0.031	0.030	0.030	0.030	0.030	0.030
Gabon	Investment	Percent of GDP			20.310	27.500	30.552	27.101	24.393	21.310	25.092	24.663	21.771	26.174	25.678
Gabon	Inflation, end of period consumer prices	Index			100.783	101.725	102.154	105.751	105.237	106.410	105.694	111.935	118.177	119.200	120.018
Gabon	General government gross debt	Percent of GDP			77.202	86.235	87.299	75.376	65.158	53.841	42.120	43.223	20.853	26.395	21.284
Gabon	Current account balance	U.S. dollars	Billions		1.001	0.517	0.338	0.574	0.800	1.983	1.485	1.996	3.446	0.862	1.542
The Gambia	Gross domestic product, current prices	U.S. dollars	Billions		0.610	0.604	0.539	0.533	0.579	0.636	0.667	0.833	1.035	0.983	1.067
The Gambia	Gross domestic product per capita, current prices	U.S. dollars	Units		485.461	467.386	406.445	391.600	410.858	436.260	441.822	532.951	639.851	587.297	616.555
The Gambia	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		1,477.494	1,554.276	1,489.433	1,584.885	1,651.942	1,648.237	1,699.126	1,791.415	1,879.925	1,955.749	2,018.233
The Gambia	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.004	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005
The Gambia	Investment	Percent of GDP			4.562	11.173	7.278	10.039	24.217	21.569	23.839	18.289	13.982	17.974	17.433

Country	Indicator	Unit	Unit												
The Gambia	Inflation, end of period consumer prices	Index			151.693	163.932	185.252	217.789	235.407	246.814	247.859	262.780	280.741	288.371	305.063
The Gambia	General government gross debt	Percent of GDP			111.030	116.619	143.976	141.887	120.904	117.911	127.646	56.261	63.032	57.005	57.386
The Gambia	Current account balance	U.S. dollars	Billions		-0.035	-0.033	-0.033	-0.039	-0.041	-0.086	-0.068	-0.080	-0.131	-0.097	-0.128
Ghana	Gross domestic product, current prices	U.S. dollars	Billions		7.241	7.316	9.342	11.034	14.370	17.215	20.410	24.758	28.528	25.988	31.084
Ghana	Gross domestic product per capita, current prices	U.S. dollars	Units		393.257	387.418	482.425	555.593	705.520	824.105	952.739	1,126.861	1,266.113	1,124.655	1,311.625
Ghana	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		1,418.768	1,478.874	1,535.607	1,609.478	1,903.490	2,007.388	2,113.110	2,258.101	2,439.618	2,512.433	2,615.057
Ghana	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.062	0.063	0.064	0.066	0.074	0.074	0.074	0.074	0.078	0.083	0.084
Ghana	Investment	Percent of GDP			17.005	17.048	15.011	16.158	18.022	19.087	21.636	22.927	22.958	24.363	21.815
Ghana	Inflation, end of period consumer prices	Index			115.906	140.579	161.906	200.056	223.616	256.795	284.846	321.159	379.398	440.001	477.747
Ghana	General government gross debt	Percent of GDP			125.410	103.158	87.956	83.949	58.171	48.592	26.217	31.476	34.261	39.213	41.241
Ghana	Current account balance	U.S. dollars	Billions		-0.387	-0.288	-0.066	-0.125	-0.354	-0.885	-1.265	-1.970	-3.080	-1.035	-2.252
Guinea	Gross domestic product, current prices	U.S. dollars	Billions		3.112	3.035	3.209	3.446	3.666	2.937	2.903	4.157	4.517	4.550	4.633
Guinea	Gross domestic product per capita, current prices	U.S. dollars	Units		371.246	355.163	368.588	388.552	405.545	318.528	308.412	432.359	459.357	451.470	448.486
Guinea	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		865.529	901.093	936.199	949.938	936.172	952.001	987.095	1,012.157	1,061.276	1,041.907	1,046.084
Guinea	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.017	0.017	0.018	0.017	0.016	0.015	0.015	0.015	0.015	0.015	0.015

Guinea	Investment	Percent of GDP			19.703	15.362	13.366	21.617	20.727	19.535	17.230	14.243	17.515	11.420	10.469
Guinea	Inflation, end of period consumer prices	Index			168.100	170.000	180.400	202.217	258.118	334.685	465.653	525.359	596.303	643.402	777.249
Guinea	General government gross debt	Percent of GDP			118.726	113.420	103.550	112.640	119.755	150.231	137.071	92.383	88.950	77.006	88.702
Guinea	Current account balance	U.S. dollars	Billions		-0.200	-0.081	-0.079	-0.028	-0.101	-0.013	0.203	-0.426	-0.339	-0.493	-0.588
Mali	Gross domestic product, current prices	U.S. dollars	Billions		2.663	3.020	3.200	4.230	4.989	5.496	6.128	7.156	8.779	8.988	9.268
Mali	Gross domestic product per capita, current prices	U.S. dollars	Units		253.085	280.730	290.639	375.080	431.850	464.455	505.717	576.660	690.930	690.823	691.637
Mali	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		701.754	785.098	813.095	872.767	943.737	1,018.610	1,080.972	1,133.426	1,187.442	1,222.447	1,251.619
Mali	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.017	0.019	0.019	0.020	0.021	0.021	0.021	0.021	0.022	0.023	0.023
Mali	Investment	Percent of GDP			21.905	27.755	14.682	17.146	16.474	15.482	16.932	16.884	19.036	20.257	19.206
Mali	Inflation, end of period consumer prices	Index			103.001	108.381	112.800	107.149	108.794	112.450	116.484	119.497	128.387	130.536	133.073
Mali	General government gross debt	Percent of GDP			104.929	91.641	54.205	49.011	46.203	52.887	20.288	21.712	21.595	24.197	28.312
Mali	Current account balance	U.S. dollars	Billions		-0.256	-0.321	-0.099	-0.296	-0.392	-0.466	-0.249	-0.491	-1.117	-0.672	-0.786
Niger	Gross domestic product, current prices	U.S. dollars	Billions		1.672	1.815	2.074	2.645	2.901	3.375	3.649	4.297	5.395	5.273	5.577
Niger	Gross domestic product per capita, current prices	U.S. dollars	Units		155.050	163.303	180.971	223.849	238.113	268.686	281.803	321.823	391.963	371.567	381.157
Niger	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		488.318	523.278	543.292	576.278	580.839	624.183	661.434	682.468	739.246	717.333	755.300
Niger	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.012	0.013	0.013	0.014	0.013	0.014	0.014	0.014	0.014	0.014	0.014
Niger	Investment	Percent of GDP			12.341	13.000	14.903	16.333	14.593	23.094	23.589	22.839	32.291	32.953	47.000
Niger	Inflation, end of period consumer prices	Index			73.644	76.026	76.451	75.307	78.091	81.338	81.632	85.452	93.499	92.923	95.400

Niger	General government gross debt	Percent of GDP		ℹ	88.781	85.098	88.860	69.878	58.849	51.640	15.764	15.880	13.935	15.777	17.592
Niger	Current account balance	U.S. dollars	Billions	ℹ	-0.111	-0.093	-0.202	-0.198	-0.212	-0.301	-0.313	-0.352	-0.699	-1.513	-1.715
Nigeria	Gross domestic product, current prices	U.S. dollars	Billions	ℹ	46.386	44.138	59.117	67.656	87.845	112.248	145.430	165.921	207.116	168.846	216.803
Nigeria	Gross domestic product per capita, current prices	U.S. dollars	Units	ℹ	389.951	361.112	470.703	524.261	662.472	823.824	1,038.758	1,153.400	1,401.235	1,111.747	1,389.307
Nigeria	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units	ℹ	1,129.203	1,215.528	1,456.691	1,597.864	1,773.307	1,795.500	1,916.382	2,053.843	2,164.772	2,274.121	2,421.957
Nigeria	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		ℹ	0.318	0.336	0.397	0.423	0.447	0.431	0.436	0.443	0.457	0.493	0.505
Nigeria	Investment	Percent of GDP		ℹ	20.189	24.035	30.467	25.404	23.289	22.835	22.583	22.773	24.041	27.587	24.663
Nigeria	Inflation, end of period consumer prices	Index		ℹ	33.931	39.528	44.338	54.895	60.389	67.373	73.100	77.900	89.700	102.200	114.200
Nigeria	Unemployment rate	Percent of total labor force			4.700	3.800	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500
Nigeria	General government gross debt	Percent of GDP		ℹ	84.221	87.971	68.783	63.862	52.657	28.605	11.808	12.829	11.604	15.201	16.354
Nigeria	Current account balance	U.S. dollars	Billions	ℹ	5.787	2.030	-7.690	-4.021	4.966	7.345	38.570	31.094	31.824	21.899	13.886
Senegal	Gross domestic product, current prices	U.S. dollars	Billions	ℹ	4.693	4.882	5.352	6.872	8.042	8.723	9.367	11.301	13.350	12.789	12.877
Senegal	Gross domestic product per capita, current prices	U.S. dollars	Units	ℹ	453.777	460.645	493.032	618.085	706.302	748.225	784.620	924.386	1,066.369	997.608	980.929
Senegal	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units	ℹ	1,273.021	1,328.657	1,326.656	1,411.663	1,469.806	1,565.479	1,617.107	1,706.224	1,757.797	1,770.311	1,819.222
Senegal	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		ℹ	0.031	0.032	0.031	0.032	0.032	0.032	0.031	0.031	0.031	0.032	0.032
Senegal	Investment	Percent of GDP		ℹ	21.545	19.835	18.940	25.875	25.988	28.495	28.166	33.976	34.131	27.853	29.813
Senegal	Inflation, end of period	Index		ℹ	81.	84.	85.	84.	86.	87.	90.	96.	100	97.	101

neg al	consumer prices				413	712	969	690	137	362	778	386	.49 3	115	.28 1
Se neg al	General government gross debt	Percent of GDP		ℹ	74. 450	71. 501	68. 419	54. 701	47. 508	45. 660	23. 010	24. 471	24. 992	31. 959	37. 951
Se neg al	Current account balance	U.S. dollars	Billi ons	ℹ	- 0.3 28	- 0.2 46	- 0.3 23	- 0.4 37	- 0.5 52	- 0.7 84	- 0.8 87	- 1.3 34	- 1.9 08	- 0.9 84	- 1.0 67
Sie rra Le one	Gross domestic product, current prices	U.S. dollars	Billi ons	ℹ	0.6 45	0.8 01	0.9 33	0.9 85	1.0 66	1.2 14	1.4 23	1.6 64	1.9 52	1.8 56	1.9 05
Sie rra Le one	Gross domestic product per capita, current prices	U.S. dollars	Unit s	ℹ	152 .50 7	183 .34 7	205 .54 5	208 .20 4	216 .34 0	237 .63 6	270 .01 2	306 .96 0	351 .06 6	325 .66 3	325 .76 1
Sie rra Le one	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current internatio nal dollar	Unit s	ℹ	362 .70 1	424 .27 8	528 .53 4	567 .02 5	601 .32 4	639 .90 4	686 .82 4	731 .81 6	769 .39 7	781 .59 4	807 .13 3
Sie rra Le one	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		ℹ	0.0 04	0.0 04	0.0 05	0.0 05	0.0 06	0.0 06	0.0 06	0.0 06	0.0 06	0.0 06	0.0 06
Sie rra Le one	Investment	Percent of GDP		ℹ	6.6 08	6.8 87	8.9 22	14. 086	10. 773	17. 370	15. 246	13. 199	14. 759	14. 938	18. 263
Sie rra Le one	Inflation, end of period consumer prices	Index		ℹ	508 .38 3	525 .82 9	509 .63 3	567 .15 0	648 .77 0	733 .76 0	794 .39 0	903 .72 0	1,0 14. 390	1,1 23. 730	1,3 30. 460
Sie rra Le one	General government gross debt	Percent of GDP		ℹ	160 .50 2	199 .00 0	213 .27 7	224 .56 9	204 .67 4	177 .87 0	136 .68 0	55. 186	53. 734	60. 032	57. 305
Sie rra Le one	Current account balance	U.S. dollars	Billi ons	ℹ	- 0.0 56	- 0.0 51	- 0.0 19	- 0.0 48	- 0.0 62	- 0.0 86	- 0.0 80	- 0.0 91	- 0.2 24	- 0.1 55	- 0.1 86
To go	Gross domestic product, current prices	U.S. dollars	Billi ons	ℹ	1.2 99	1.3 34	1.4 81	1.6 77	1.9 40	2.1 17	2.2 05	2.5 27	3.1 77	3.1 67	3.1 94
To go	Gross domestic product per capita, current prices	U.S. dollars	Unit s	ℹ	242 .10 4	241 .27 8	260 .55 3	287 .43 0	324 .01 4	344 .58 1	349 .97 7	391 .24 8	479 .71 6	466 .33 7	458 .78 5
To go	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current internatio nal dollar	Unit s	ℹ	685 .90 0	669 .58 6	655 .60 6	684 .57 3	696 .52 0	755 .29 2	791 .47 4	812 .86 6	829 .40 8	842 .69 5	858 .03 7
To go	Gross domestic product based on purchasing-power-parity	Percent		ℹ	0.0 09	0.0 08	0.0 08	0.0 08	0.0 08	0.0 08	0.0 08	0.0 08	0.0 08	0.0 08	0.0 08

	(PPP) share of world total														
To go	Investment	Percent of GDP		[i]	15.180	15.613	16.119	14.428	14.515	16.292	16.775	14.643	17.321	18.021	16.866
To go	Inflation, end of period consumer prices	Index		[i]	76.745	82.005	83.278	81.835	85.042	89.694	91.039	94.111	103.776	101.254	108.291
To go	General government gross debt	Percent of GDP		[i]	n/a	102.140	99.929	101.473	92.986	76.802	85.270	100.718	83.145	67.830	28.203
To go	Current account balance	U.S. dollars	Billions	[i]	-0.112	-0.113	-0.118	-0.181	-0.194	-0.209	-0.186	-0.219	-0.304	-0.219	-0.252

Report for Selected Countries and Subjects

You will find notes on the data and options to download the table below your results.

Shaded cells indicate IMF staff estimates

Country	Subject Descriptor	Units	Scale	Country/Series-specific Notes	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
China	Gross domestic product, current prices	U.S. dollars	Billions	[i]	1,198.478	1,324.814	1,453.833	1,640.962	1,931.646	2,256.919	2,712.917	3,494.235	4,519.950	4,990.528	5,878.257
China	Gross domestic product per capita, current prices	U.S. dollars	Units	[i]	945.597	1,038.036	1,131.802	1,269.829	1,486.019	1,726.054	2,063.871	2,644.563	3,403.526	3,738.952	4,382.136
China	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units	[i]	2,377.754	2,615.048	2,880.568	3,217.457	3,614.103	4,102.495	4,748.981	5,554.186	6,188.884	6,785.872	7,518.716
China	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		[i]	7.127	7.551	8.013	8.520	8.921	9.457	10.138	11.002	11.735	12.902	13.610
China	Investment	Percent of GDP		[i]	35.119	36.268	37.866	41.203	43.263	42.099	42.972	41.738	44.046	48.243	48.774
China	Inflation, end of period consumer prices	Index		[i]	106.278	106.149	105.525	108.395	111.893	113.422	115.729	123.405	126.531	127.375	133.362
China	Unemployment rate	Percent of total labor		[i]	3.100	3.600	4.000	4.300	4.200	4.200	4.100	4.000	4.200	4.300	4.100

												0			
		force													
Ch ina	General government gross debt	Percent of GDP		[icon]	16. 445	17. 711	18. 937	19. 245	18. 535	17. 635	16.1 87	19 .5 91	16. 963	17. 670	17. 711
Ch ina	Current account balance	U.S. dollars	Bi lli on s	[icon]	20. 519	17. 405	35. 422	45. 875	68. 659	160 .81 8	253. 268	37 1. 83 3	436 .10 7	297 .14 2	306 .20 0

[edit] List of states by foreign exchange reserves

For consistency, forward currency swap contracts are not included in this list until they mature, figures that include them may be higher or lower than those listed here. IMF or other outstanding loans are not shown here, and if accounted for many nations would list lower.

Rank	Country/Monetary Authority	Foreign exchange reserves (Millions of USD)	Figures as of
—	**World** (sum of all countries)	N/A	--
1	People's Republic of China	2,622,000	Dec 2010[1]
2	Japan	1,096,185	Dec 2010[2]
-	Eurosystem (EU member states which have adopted the euro, incl. ECB)	789,891	Dec 2010[2]
3	Russia	479,379	Dec 2010[2]
4	Saudi Arabia	456,200	Dec 2010[1]
5	Republic of China (Taiwan)	382,800	Dec 2010 [1]
6	Brazil	297,696	Jan 2011[2]
7	India	297,334	Dec 2010[2]
8	Republic of Korea	291,571	Dec 2010[2]
9	Switzerland	270,517	Dec 2010[2]
-	Hong Kong	268,731	Dec 2010[2]
10	Singapore	225,754	Dec 2010[2]
11	Germany	216,598	Dec 2010[2]
12	Thailand	172,129	Dec 2010[2]
13	France	166,319	Dec 2010[2]
14	Italy	158,926	Dec 2010[2]
15	Algeria	150,100	Dec 2010[1]
16	United States	133,945	Jan 2011[2]
17	Mexico	117,413	Nov 2010[2]
18	Malaysia	108,100	Jan 2011[2]
19	Libya	107,300	Dec 2010[1]
20	United Kingdom	106,567	Dec 2010[2]
21	Indonesia	96,207	Dec 2010[2]
22	Poland	93,514	Dec 2010[2]
23	Turkey	85,968	Dec 2010[2]
24	Denmark	76,528	Dec 2010[2]
—	European Central Bank	75.887	Dec 2010[2]

ANNEX 2

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	(ECB, not owned by any single EU member)		
25	Iran	75,060	Dec 2010[1]
26	Israel	71,284	Dec 2010[2]
27	Philippines	62,371	Dec 2010[2]
28	Canada	57,151	Dec 2010[2]
29	Argentina	52,190	Dec 2010[2]
30	Sweden	48,295	Dec 2010[2]
31	Romania	48,037	Dec 2010[2]
32	Netherlands	46,241	Dec 2010[2]
33	Norway	45,738	Dec 2010[2]
34	Iraq	45,680	Dec 2010[1]
35	Hungary	44,996	Dec 2010[2]
36	Peru	43,933	Jan 2011[2]
37	South Africa	43,834	Dec 2010[2]
38	Nigeria	43,360	Dec 2010[1]
39	Czech Republic	42,338	Dec 2010[2]
40	Australia	42,268	Dec 2010[2]
41	Lebanon	41,570	Dec 2010[1]
42	United Arab Emirates	39,100	Dec 2010[1]
43	Egypt	36,194	Dec 2010[2]
44	Ukraine	34,576	Dec 2010[2]
45	Spain	31,942	Dec 2010[2]
46	Venezuela	29,490	Dec 2010[1]
47	Kazakhstan	28,291	Dec 2010[2]
48	Colombia	28,078	Dec 2010[2]
49	Belgium	26,850	Dec 2010[2]
50	Chile	26,006	Dec 2010[2]
51	Morocco	22,885	Nov 2010[2]
52	Vietnam	19,200	Dec 2010[2]
53	Kuwait	22,420	Dec 2010[1]
54	Qatar	22,410	Dec 2010[1]
55	Austria	22,299	Dec 2010[2]
56	Portugal	21,002	Dec 2010[2]
57	Macau	18,730	Mar 2010[3]
58	Bulgaria	17,339	Dec 2010[2]
59	New Zealand	16,724	Dec 2010[2]
60	Pakistan	16,100	Dec 2010[2]
61	Croatia	14,573	Nov 2010[2]

62	Jordan	13,637	Dec 2010[2]
63	Bangladesh	10,790	Dec 2010[1]
64	Finland	9,561	Dec 2010[2]
65	Bolivia	8,739	Dec 2010[1]
66	Tunisia	9,549	Dec 2010[2]
67	Trinidad and Tobago	9,659	Dec 2010[1]
68	Uruguay	7,744	Dec 2010[2]
69	Latvia	7,605	Dec 2010[2]
70	Lithuania	6,836	Dec 2010[2]
71	Azerbaijan	6,330	Dec 2010[1]
72	Greece	6,316	Dec 2010[2]
73	Iceland	5,798	Dec 2010[2]
74	Belarus	5,705	Nov 2010[2]
75	Sri Lanka	5,630	Dec 2010[1]
76	Costa Rica	4,627	Dec 2010[2]
77	Paraguay	4,082	Dec 2010[1]
78	Cambodia	3,840	Dec 2010[1]
79	El Salvador	2,883	Dec 2010[2]
80	Honduras	2,699	Dec 2010[2]
81	Estonia	2,568	Dec 2010[2]
82	Myanmar	3,762	Dec 2010[1]
83	Georgia	2,265	Dec 2010[2]
84	Slovakia	2,166	Dec 2010[2]
85	Ireland	2,101	Nov 2010[2]
86	Armenia	1,859	Dec 2010[2]
87	Kyrgyzstan	1,716	Dec 2010[2]
88	Moldova	1,611	Nov 2009[2]
89	Cyprus	1,141	Dec 2010[2]
90	Slovenia	1,073	Dec 2010[2]
91	Luxembourg	851	Dec 2010[2]
92	Laos	576	Dec 2010[1]
93	Malta	541	Dec 2010[2]

Worldwide Corruption Perceptions ranking of countries
published by Transparency International

Rank 2010	Country	Index								
		2010[15]	2009[16]	2008[17]	2007[18]	2006[19]	2005[20]	2004[21]	2003	2002
1	Denmark	9.3	9.3	9.3	9.4	9.5	9.5	9.5	9.5	9.5
1	New Zealand	9.3	9.4	9.3	9.4	9.6	9.6	9.5	9.5	9.4
1	Singapore	9.3	9.2	9.2	9.3	9.2	9.3	9.4	9.4	9.4
4	Finland	9.2	8.9	9	9.4	9.6	9.6	9.7	9.7	9.9
4	Sweden	9.2	9.2	9.3	9.3	9.2	9.2	9.3	9.3	9
6	Canada	8.9	8.7	8.7	8.7	8.5	8.4	8.7	9	8.9
7	Netherlands	8.8	8.9	8.9	9	8.7	8.6	8.9	9	8.8
8	Switzerland	8.7	9	9	9	9.1	9.1	8.8	8.5	8.4
8	Australia	8.7	8.7	8.7	8.6	8.7	8.8	8.8	8.6	8.5
10	Norway	8.6	8.6	7.9	8.7	8.8	8.9	8.8	8.5	8.6
11	Iceland	8.5	8.7	8.9	9.2	9.6	9.7	9.6	9.4	9.2
11	Luxembourg	8.5	8.2	8.3	8.4	8.6	8.5	8.7	9	8.7
13	Hong Kong	8.4	8.2	8.1	8.3	8.3	8.3	8	8.2	7.9
14	Ireland	8	8	7.7	7.5	7.4	7.4	7.5	6.9	7.5
15	Austria	7.9	7.9	8.1	8.1	8.6	8.7	8	7.8	7.8
15	Germany	7.9	8	7.9	7.8	8	8.2	7.7	7.3	7.4
17	Barbados	7.8	7.4	7	6.9	6.7	6.9			
17	Japan	7.8	7.7	7.3	7.5	7.6	7.3	7	7.1	7.1
19	Qatar	7.7	7	6.5	6	6	5.9	5.6		
20	United Kingdom	7.6	7.7	7.7	8.4	8.6	8.6	8.6	8.7	8.3
21	Chile	7.2	6.7	6.9	7	7.3	7.3	7.4	7.5	7.5
22	Belgium	7.1	7.1	7.3	7.1	7.3	7.4	7.6	7.1	6.6
22	United States	7.1	7.5	7.3	7.2	7.3	7.6	7.5	7.7	7.6
24	Uruguay	6.9	6.7	6.9	6.7	6.4	5.9	5.5	5.1	5.1
25	France	6.8	6.9	6.9	7.3	7.4	7.5	6.9	6.3	6.7
26	Estonia	6.5	6.6	6.6	6.5	6.7	6.4	5.5	5.6	5.6
27	Slovenia	6.4	6.6	6.7	6.6	6.4	6.1	5.9	6	5.2
28	Cyprus	6.3	6.6	6.4	5.3	5.6	5.7	5.4	6.1	
28	United Arab	6.3	6.5	5.9	5.7	6.2	6.2	6.1	5.2	
30	Israel	6.1	6.1	6	6.1	5.9	6.3	6.4	7	7.3
30	Spain	6.1	6.1	6.5	6.7	6.8	7	6.9	7.1	7
32	Portugal	6	5.8	6.1	6.5	6.6	6.5	6.6	6.3	6.3
33	Puerto Rico	5.8	5.8	5.8						
33	Botswana	5.8	5.6	5.8	5.4	5.6	5.9	6	5.7	6.4
33	Taiwan	5.8	5.6	5.7	5.7	5.9	5.9	5.6	5.7	5.6
36	Bhutan	5.7	5	5.4	5					
37	Malta	5.6	5.2	5.8	5.8	6.4	6.4			
38	Brunei	5.5	5.5							
39	South Korea	5.4	5.5	5.6	5.1	5.1	5	4.5	4.3	4.5
39	Mauritius	5.4	5.4	5.5	4.7	5.1	4.2	4.1	4.4	4.5
41	Oman	5.3	5.5	5.5	4.7	5.4	6.3	6.1	6.3	
41	Costa Rica	5.3	5.3	5.1	5	4.1	4.2	4.9	4.3	4.5
41	Poland	5.3	5	4.6	4.2	3.7	3.4	3.5	3.6	4
44	Dominica	5.2	5.9	6	5.6	4.5	3	2.9	3.3	3.2

Rank 2010	Country	Index								
		2010	2009	2008	2007	2006	2005	2004	2003	2002
91	Swaziland	3.2	3.6	3.6	3.3	2.5	2.7			
91	Guatemala	3.2	3.4	3.1	2.8	2.6	2.5	2.2	2.4	2.5
91	Sri Lanka	3.2	3.1	3.2	3.2	3.1	3.2	3.5	3.4	3.7
91	Colombia	3.2	2.9	1.9	2.3	2.5	2.7	2.8	2.5	
91	Kiribati	3.2	2.8	3.1	3.3	3.7				
98	Burkina Faso	3.1	3.6	3.5	2.9	3.2	3.4			
98	Mexico	3.1	3.3	3.6	3.5	3.3	3.5	3.6	3.6	3.6
98	Egypt	3.1	2.8	2.8	2.9	3.3	3.4	3.2	3.3	3.4
101	Dominican Republic	3	3	3	3	2.8	3	2.9	3.3	3.5
101	Tonga	3	3	2.4	1.7					
101	Zambia	3	3	2.8	2.6	2.6	2.6	2.6	2.5	2.6
101	São Tomé and	3	2.8	2.7	2.7					
105	Moldova	2.9	3.3	2.9	2.8	3.2	2.9	2.3	2.4	2.1
105	Senegal	2.9	3	3.4	3.6	3.3	3.2	3	3.2	3.1
105	Argentina	2.9	2.9	2.9	2.9	2.9	2.8	2.5	2.5	2.8
105	Kazakhstan	2.9	2.7	2.2	2.1	2.6	2.6	2.2	2.4	2.3
105	Algeria	2.9	2.8	3.2	3	3.1	2.8	2.7	2.6	
110	Benin	2.8	2.9	3.1	2.7	2.5	2.9	3.2		
110	Gabon	2.8	2.9	3.1	3.3	3	2.9	3.3		
110	Indonesia	2.8	2.8	2.6	2.3	2.4	2.2	2	1.9	1.9
110	Bolivia	2.8	2.7	3	2.9	2.7	2.5	2.2	2.3	2.2
110	Solomon Islands	2.8	2.8	2.9	2.8					
110	Kosovo	2.8								
116	Ethiopia	2.7	2.6	2.4	2.4	2.2	2.3	2.5	3.5	
116	Mali	2.7	3.1	2.7	2.8	2.9	3.2	3		
116	Mongolia	2.7	3	3	2.8	3	3			
116	Vietnam	2.7	2.7	2.6	2.6	2.6	2.6	2.4	2.4	
116	Guyana	2.7	2.6	2.6	2.5	2.5				
116	Tanzania	2.7	3	3.2	2.9	2.9	2.8	2.5	2.7	
116	Mozambique	2.7	2.6	2.8	2.8	2.8	2.8	2.7		
123	Armenia	2.6	2.9	3	2.9	2.9	3.1	3		
123	Madagascar	2.6	3.4	3.2	3.1	2.8	3.1	2.6	1.7	
123	Niger	2.6	2.8	2.6	2.3	2.4	2.2			
123	Eritrea	2.6	2.6	2.8	2.9	2.6	2.6			
127	Belarus	2.5	2	2.1	2.1	2.6	3.3	4.2	4.8	
127	Syria	2.5	2.1	2.4	2.9	3.4	3.4	3.4		
127	Lebanon	2.5	3	3	3.6	3.1	2.7	3		
127	Nicaragua	2.5	2.5	2.6	2.6	2.6	2.7	2.6	2.5	
127	Ecuador	2.5	2	2.1	2.3	2.5	2.4	2.2	2.2	
127	Timor-Leste	2.5	2.2	2.6	2.6					
127	Uganda	2.5	2.6	2.8	2.6	2.7	2.5	2.6	2.2	2.1
134	Azerbaijan	2.4	1.9	2.1	2.4	2.2	1.9	1.8	2	
134	Nigeria	2.4	2.7	2.2	2.2	1.9	1.6	1.4	1.6	
134	Honduras	2.4	2.6	2.5	2.5	2.6	2.3	2.3	2.7	

ANNEX 3

Rank	Country									
45	...e Verde	5.1	5.1	5.1	4.9					
46	...cau	5	5.3	5.4	5.7	6.6				
46	...uania	5	4.9	4.6	4.8	4.8	4.8	4.6	4.7	4.8
48	...hrain	4.9	5.1	5.4	5	5.7	5.8	5.8	6.1	
49	...chelles	4.8	4.8	4.8	4.5	3.6	4	4.4		
50	...ngary	4.7	5.1	5.1	5.3	5.2	5	4.8	4.8	4.9
50	...dan	4.7	5	5.1	4.7	5.3	5.7	5.3	4.6	4.5
50	...di Arabia	4.7	4.3	3.5	3.4	3.3	3.4	3.4	4.5	
53	...ch Republic	4.6	4.9	5.2	5.2	4.8	4.3	4.2	3.9	3.7
54	...wait	4.5	4.1	4.3	4.3	4.8	4.7	4.6	5.3	
54	...th Africa	4.5	4.7	4.9	5.1	4.6	4.5	4.6	4.4	4.8
56	...laysia	4.4	4.5	5.1	5.1	5	5.1	5	5.2	4.9
56	...mibia	4.4	4.5	4.5	4.5	4.1	4.3	4.1	4.7	5.7
56	...key	4.4	4.4	4.6	4.1	3.8	3.5	3.2	3.1	3.2
59	...via	4.3	4.5	5	4.8	4.7	4.2	4	3.8	3.7
59	...vakia	4.3	4.5	5	4.9	4.7	4.3	4	3.7	3.7
59	...nisia	4.3	4.2	4.4	4.2	4.6	4.9	5	4.9	4.8
62	...atia	4.1	4.1	4.4	4.1	3.4	3.4	3.5	3.7	3.8
62	...ana	4.1	3.9	3.9	3.7	3.3	3.5	3.4	3.3	3.9
62	...cedonia	4.1	3.8	3.6	3.3	2.7	2.7	2.7	2.3	
62	...moa	4.1	4.5	4.4	4.5					
66	...anda	4	3.3	3	2.8	2.5	3.1			
67	...ly	3.9	4.3	4.8	5.2	6.2	6.2	5.2		
68	...orgia	3.8	4.1	3.9	3.4	2.8	2.3	2	1.8	2.4
69	...ba	3.7	4.4	4.3	4.2	3.5	3.8	3.7	4.6	
69	...ntenegro	3.7	3.9	3.4	3.3					
69	...mania	3.7	3.8	3.8	3.7	3.1	3	2.9	2.8	2.6
69	...zil	3.7	3.7	3.5	3.5	3.3	3.7	3.9	3.9	4
73	...garia	3.6	3.8	3.6	4.1	4	4	4.1	3.9	4
73	...alvador	3.6	3.4	3.9	4	4	4.2	3.7	3.4	3.2
73	...nama	3.6	3.4	3.4	3.2	3.1	3.5	3.7	3.4	3
73	...nidad and	3.6	3.6	3.6	3.4	3.2	3.8	4.2	4.6	4.9
73	...nuatu	3.6	3.2	2.9	3.1					
78	...ece	3.5	3.8	4.7	4.6	4.4	4.3	4.3	4.3	4.2
78	...ombia	3.5	3.7	3.8	3.8	3.9	4	3.8	3.7	3.6
78	...ru	3.5	3.7	3.6	3.5	3.3	3.5	3.5	3.7	3.4
78	...na	3.5	3.6	3.6	3.5	3.3	3.2	3.4	3.4	3.5
78	...iland	3.5	3.4	3.5	3.3	3.6	3.8	3.6	3.3	3.2
78	...ola[22]	3.5	3.4	3.4	3	2.8	2.7	2.3		
78	...otho	3.5	3.3	3.2	3.3	3.2	3.4			
85	...lawi	3.4	3.3	2.8	2.7	2.7	2.8	2.8	2.8	2.9
85	...rocco	3.4	3.3	3.5	3.5	3.2	3.2	3.2	3.3	3.7
87	...ia	3.3	3.4	3.4	3.5	3.3	2.9	2.8	2.8	2.7
87	...ania	3.3	3.2	3.4	2.9	2.6	2.4	2.5	2.5	2.5
87	...eria	3.3	3.1	2.4	2.1	2.2				
87	...naica	3.3	3	3.1	3.3	3.7	3.6	3.3	3.8	4
91	...nia and	3.2	3.2	3.3	2.9	2.9	3.1	3.3		
91	...bouti	3.2	3	2.9						

Rank	Country									
134	...to	2.4	2.7	2.3	2.4					
134	...ngladesh	2.4	2.1	2	2	1.7	1.5	1.3	1.2	
134	...lippines	2.4	2.3	2.5	2.5	2.5	2.6	2.5	2.6	
134	...rra Leone	2.4	1.9	2.1	2.2	2.4	2.3	2.2		
134	...raine	2.4	2.5	2.7	2.8	2.6	2.2	2.3	2.4	
134	...mbabwe	2.4	1.8	2.1	2.4	2.6	2.3	2.3	2.7	
143	...kistan	2.3	2.5	2.4	2.2	2.1	2.1	2.5	2.6	
143	...ldives	2.3	2.8	3.3						
143	...uritania	2.3	2.8	2.6	3.1					
146	...meroon	2.2	2.3	2.4	2.3	2.2	2.1	1.8	2.2	
146	...Nepal	2.2	2.7	2.5	2.5	2.5	2.8			
146	...ya	2.2	2.6	2.5	2.7	2.5	2.5	2.1		
146	...te d'Ivoire	2.2	2	2.1	1.9	2	2.1	2.7		
146	...aguay	2.2	2.4	2.4	2.6	2.1	1.9	1.6	1.7	
146	...men	2.2	2.3	2.5	2.6	2.7	2.4	2.6	2.4	
146	...ti	2.2	1.4	1.6	1.8	1.8	1.5	1.5	2.2	
146	...n	2.2	2.3	2.5	2.7	2.9	2.9	3		
154	...moros	2.1	2.5	2.6						
154	...ssia	2.1	2.1	2.3	2.5	2.4	2.8	2.7	2.7	
154	...nya	2.1	2.1	2.1	2.2	2.1	2.1	1.9	1.9	
154	...ua New Guinea	2.1	2	2	2.4	2.3	2.6	2.1		
154	...mbodia	2.1	1.8	2	2.1	2.3	1.5	1.3	1.2	
154	...ntral African	2.1	2	2	2.4					
154	...os	2.1	2	1.9	2.6	3.3				
154	...ikistan	2.1	2	2.1	2.2	2.1	2	1.8		
154	...public of the Congo	2.1	1.9	2.1	2.3	2.3	2.2			
154	...inea-Bissau	2.1	1.9	2.2						
164	...mocratic Republic	2	1.8	1.9	2	2.1	2			
164	...nea	2	1.6	1.9	1.9					
164	...gyzstan	2	1.8	2.1	2.2	2.3	2.2	2.1		
164	...nezuela	2	1.9	2	2.3	2.3	2.3	2.4	2.5	
168	...gola	1.9	2.2	1.9	2.2	2	2	1.8	1.7	
168	...uatorial Guinea	1.9	1.7	1.9	2.1	1.9				
170	...undi	1.8	1.9	2.5	2.4	2.3				
171	...ad	1.7	1.6	1.8	2	1.7	1.7			
172	...dan	1.6	1.6	1.8	2	2.1	2.2	2.3		
172	...rkmenistan	1.6	1.8	2	2.2	1.8	2			
172	...bekistan	1.6	1.8	1.7	2.7	2.2	2.3	2.4	2.9	
175	...	1.5	1.3	1.5	1.9	2.2	2.1	2.2		
176	...ghanistan	1.4	1.5	1.8	2.5					
176	...anmar	1.4	1.3	1.4	1.9	1.8	1.7	1.6		
178	...malia	1.1	1	1.4	2.1					
−	...lize	2.9	3	3.5	3.7	3.8	4.5			
−	...enada	3.4	3.5							
−	...aint Lucia	7	7.1	6.8						
−	...renadines	6.4	6.5	6.1						

These numbers should be taken as measures of extreme poverty, not economic discomfort

Country	Population living under 1.25 and 2 dollar (PPP) a day (%)	
	< $1.25[1]	< $2[2]
Albania	2	7.9
Algeria	6.8[3]	23.6[3]
Angola	54.3	70.2
Argentina	3.4	7.3
Armenia	3.7	21
Azerbaijan	<2	<2
Bangladesh	49.6	81.3
Belarus	<2	<2
Benin	47.3	75.3
Bhutan	26.2	49.5
Bolivia	11.9	21.9
Bosnia and	<2	<2
Botswana	31.2[3]	49.4[3]
Brazil	5.2	12.7
Bulgaria	<2	2.4
Burkina Faso	56.5	81.2
Burundi	81.3	93.5
Cambodia	25.8	57.8
Cameroon	32.8	57.7
Cape Verde	20.6	40.2
Central African	62.4	81.9
Chad	61.9	83.3
Chile	<2	2.4
China, People's	15.9	36.3
Colombia	16	27.9
Comoros	46.1	65
Congo,	59.2	79.6
Congo, Republic	54.1	74.4
Costa Rica	<2	4.3
Côte d'Ivoire	23.3	46.8
Croatia	<2	<2
Czech Republic	<2[3]	<2[3]
Djibouti	18.8	41.2
Dominican	4.4	12.3
Ecuador	4.7	12.8
Egypt	<2	18.5
El Salvador	6.4	13.2
Estonia	<2	<2
Ethiopia	39	77.6
Gabon	4.8	19.6
Gambia	34.3	56.7
Georgia	13.4	30.4
Ghana	30	53.6
Guatemala	11.7	24.3
Guinea	70.1	87.2
Guinea-Bissau	48.8	77.9
Guyana	7.7[3]	16.8[3]
Haiti	54.9	72.1

Country	UNDP[5]	CIA[6]	Year	Other	Year
Afghanistan	42	36	FY08/09	N/A	N/A
Albania	18.5	25	2004 est.	25	2002[7]
Algeria	22.6	23	2006 est.	N/A	N/A
Andorra	N/A	8	2008	N/A	N/A
Angola	N/A	40.5	2006 est.	N/A	N/A
Anguilla	N/A	23	2002	N/A	N/A
Argentina	N/A	13.9	Jan.-Jun. 2009	11.3	2009[8][9]
Armenia	50.9	26.5	2006 est.	51	2001[7]
Austria	N/A	6	2008	N/A	N/A
Azerbaijan	49.6	11	2009 est.	50	2001[7]
Bahamas, The	N/A	9.3	2004	N/A	N/A
Bangladesh	49.8	36.3	2008 est.	50	2000[7]
Belarus	17.4	27.1	2003 est.	18	2002[7]
Belgium	N/A	15.2	2007 est.	N/A	N/A
Belize	N/A	33.5	2002 est.	N/A	N/A
Benin	39	37.4	2007 est.	N/A	N/A
Bermuda	N/A	19	2000	N/A	N/A
Bhutan	N/A	23.2	2008	N/A	N/A
Bolivia	64.6	60	2006 est.	54	2007[8]
Bosnia and Herzegovina	19.5	25	2004 est.	20	2002[7]
Botswana	N/A	30.3	2003	N/A	N/A
Brazil	21.5	26	2008	24.9	2009[8]
Bulgaria	12.8	14	2008	13	2001[7]
Burkina Faso	46.4	46.4	2004	46	2003[7]
Burma	N/A	32.7	2007 est.	N/A	N/A
Burundi	68	68	2002 est.	N/A	N/A
Cambodia	35	31	2004	35	2004[7]
Cameroon	40.2	48	2000 est.	40	2001[7]
Canada	N/A	10.8	2005[10]	4.9	2004[11]
Cape Verde	N/A	30	2000	N/A	N/A
Chad	43.4	80	2001 est.	N/A	N/A
Chile	17	18.2	2005	11.5	2009[8]
People's Republic of	2.8	2.8	2007	N/A	N/A
Colombia	64	46.8	2008	45.7	2009[8]
Comoros	N/A	60	2002 est.	N/A	N/A
Congo, Democratic	71.3	N/A		N/A	
Congo, Republic of the	42.3	N/A		N/A	N/A
Costa Rica	23.9	16	2006 est.	18.9	2009[8]
Côte d'Ivoire	N/A	42	2006 est.	N/A	N/A
Croatia	11.1	17	2008	N/A	N/A
Denmark	N/A	12.1	2007	N/A	N/A
Djibouti	N/A	42	2007 est.	N/A	N/A
Dominica	N/A	30	2002 est.	N/A	N/A
Dominican Republic	42.2	42.2	2004	41.1	2009[8]
Ecuador	45.2	35.1	2008	40.2	2009[8][9]
Egypt	16.7	20	2005 est.	17	1999-2000[7]
El Salvador	37.2	30.7	2006 est.	47.9	2009[8]
Eritrea	53	50	2004 est.	N/A	N/A

ANNEX 4

Country		
Honduras		18.2	29.7
Hungary	<2	<2	
India		37	75.6
Indonesia		29.4	60
Iran	<2		8
Jamaica	<2		5.8
Jordan	<2		3.5
Kazakhstan	<2	<2	
Kenya		19.7	39.9
Kyrgyzstan		3.4	27.5
Laos	44[4]		76.8[4]
Latvia	<2	<2	
Lesotho		43.4	62.2
Liberia		83.7	94.8
Lithuania	<2	<2	
Macedonia	<2		5.3
Madagascar		67.8	89.6
Malawi		73.9	90.4
Malaysia	<2		7.8
Mali		51.4	77.1
Mauritania		21.2	44.1
Mexico		4	8.2
Moldova		2.4	11.5
Mongolia		2.2	13.6
Montenegro	<2	<2	
Morocco		2.5	14
Mozambique		74.7	90
Namibia	49.1[3]		62.2[3]
Nepal		55.1	77.6
Nicaragua		15.8	31.9
Niger		65.9	85.6
Nigeria		64.4	83.9
Pakistan		22.6	60.3
Panama		9.5	17.9
Papua New	35.8[3]		57.4[3]
Paraguay		6.5	14.2
Peru		7.7	17.8
Philippines		22.6	45
Poland	<2	<2	
Romania	<2		4.1
Russia	<2	<2	
Rwanda		76.6	90.3
Saint Lucia	20.9[3]		40.6[3]
Senegal		33.5	60.4
Serbia	<2	<2	
Seychelles	<2	<2	
Sierra Leone		53.4	76.1
Slovakia	<2[3]		<2[3]
Slovenia	<2	<2	
South Africa		26.2	42.9
Sri Lanka		14	39.7
Suriname	15.5[3]		27.2[3]

Country					
Estonia	8.9	19.5	2007	N/A	N/A
Ethiopia	44.2	38.7	FY05/06 est.	44	1999-2000[7]
Fiji	N/A	25.5	FY90/91	N/A	N/A
France	N/A	6.2	2004	N/A	N/A
The Gambia	61.3	N/A	N/A	61	2003[7]
Gaza Strip	N/A	70	2009 est.	N/A	N/A
Georgia	54.5	31	2006	54	2003[7]
Germany	N/A	11	2001 est.	N/A	N/A
Ghana	28.5	28.5	2007 est.	28	2005-6[7]
Greece	N/A	20	2009 est.	N/A	N/A
Greenland	N/A	9.2	2007	N/A	N/A
Grenada	N/A	32	2000	N/A	N/A
Guam	N/A	23	2001 est.	N/A	N/A
Guatemala	56.2	56.2	2004 est.	54.8	2006[8]
Guinea	40	47	2006 est.	N/A	N/A
Guinea-Bissau	65.7	N/A	N/A	66	2002[7]
Haiti	65	80	2003 est.	N/A	N/A
Honduras	50.7	65	2008	68.9	2007[8]
Hungary	17.3	12	2010 est.	N/A	N/A
India	28.6	25	2007 est.	29	1999-2000[7]
Indonesia	16	17.8	2006	17	2004[7]
Iran	N/A	18	2007 est.	N/A	N/A
Ireland	N/A	4.2	2008 est.	6.8	2004 est.[12]
Israel	N/A	23.6	2007[13]	N/A	N/A
Jamaica	18.7	14.8	2003 est.	19	2000[7]
Jordan	14.2	14.2	2002	14	2002[7]
Kazakhstan	15.4	12.1	2008	15	2002[7]
Kenya	52	50	2000 est.	N/A	N/A
Korea, South	N/A	15	2003 est.	N/A	N/A
Kosovo	N/A	35	2007 est.	N/A	N/A
Kyrgyzstan	43.1	40	2004 est.	43	2005[7]
Laos	33	26	2009 est.	33	2003[7]
Latvia	5.9	N/A	N/A	6	2004[7]
Lebanon	N/A	28	1999 est.	N/A	N/A
Lesotho	68	49	1999	N/A	N/A
Liberia	N/A	80	2000 est.	N/A	N/A
Libya	N/A	7.4	2005 est.	N/A	N/A
Lithuania	N/A	4	2003	N/A	N/A
Macedonia, Republic of	21.7	28.7	2009	29.4	2007[14]
Madagascar	71.3	50	2004 est.	N/A	N/A
Malawi	65.3	53	2004	N/A	N/A
Malaysia	15.5	5.1	2002 est.	N/A	N/A
Maldives	N/A	16	2008	N/A	N/A
Mali	63.8	36.1	2005 est.	N/A	N/A
Mauritania	46.3	40	2004 est.	46	2000[7]
Mauritius	10.6	8	2006 est.	N/A	N/A
Mexico	17.6	18.2	2008[15]	19.8	2008[8]
Micronesia, Federated	N/A	26.7	2000	N/A	N/A
Moldova	48.5	29.5	2005	48	2002[7]
Mongolia	36.1	36.1	2004	36	2002[7]
Montenegro	N/A	7	2007 est.	N/A	N/A
Morocco	19	15	2007 est.	N/A	N/A

Gui nea	Gross domestic product, current prices	U.S. dollars	Billi ons	ℹ	3.1 12	3.0 35	3.2 09	3.4 46	3.6 66	2.9 37	2.9 03	4.1 57	4.5 17	4.5 50	4.6 33
Gui nea	Gross domestic product per capita, current prices	U.S. dollars	Unit s	ℹ	371 .24 6	355 .16 3	368 .58 8	388 .55 2	405 .54 5	318 .52 8	308 .41 2	432 .35 9	459 .35 7	451 .47 0	448 .48 6
Gui nea	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current internatio nal dollar	Unit s	ℹ	865 .52 9	901 .09 3	936 .19 9	949 .93 8	936 .17 2	952 .00 1	987 .09 5	1,0 12. 157	1,0 61. 276	1,0 41. 907	1,0 46. 084
Gui nea	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		ℹ	0.0 17	0.0 17	0.0 18	0.0 17	0.0 16	0.0 15	0.0 15	0.0 15	0.0 15	0.0 15	0.0 15
Gui nea	Investment	Percent of GDP		ℹ	19. 703	15. 362	13. 366	21. 617	20. 727	19. 535	17. 230	14. 243	17. 515	11. 420	10. 469
Gui nea	Inflation, end of period consumer prices	Index		ℹ	168 .10 0	170 .00 0	180 .40 0	202 .21 7	258 .11 8	334 .68 5	465 .65 3	525 .35 9	596 .30 3	643 .40 2	777 .24 9
Gui nea	General government gross debt	Percent of GDP		ℹ	118 .72 6	113 .42 0	103 .55 0	112 .64 0	119 .75 5	150 .23 1	137 .07 1	92. 383	88. 950	77. 006	88. 702
Gui nea	Current account balance	U.S. dollars	Billi ons	ℹ	- 0.2 00	- 0.0 81	- 0.0 79	- 0.0 28	- 0.1 01	- 0.0 13	0.2 03	- 0.4 26	- 0.3 39	- 0.4 93	- 0.5 88
Ma li	Gross domestic product, current prices	U.S. dollars	Billi ons	ℹ	2.6 63	3.0 20	3.2 00	4.2 30	4.9 89	5.4 96	6.1 28	7.1 56	8.7 79	8.9 88	9.2 68
Ma li	Gross domestic product per capita, current prices	U.S. dollars	Unit s	ℹ	253 .08 5	280 .73 0	290 .63 9	375 .08 0	431 .85 0	464 .45 5	505 .71 7	576 .66 0	690 .93 0	690 .82 3	691 .63 7
Ma li	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current internatio nal dollar	Unit s	ℹ	701 .75 4	785 .09 8	813 .09 5	872 .76 7	943 .73 7	1,0 18. 610	1,0 80. 972	1,1 33. 426	1,1 87. 442	1,2 22. 447	1,2 51. 619
Ma li	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		ℹ	0.0 17	0.0 19	0.0 19	0.0 20	0.0 21	0.0 21	0.0 21	0.0 21	0.0 22	0.0 23	0.0 23
Ma li	Investment	Percent of GDP		ℹ	21. 905	27. 755	14. 682	17. 146	16. 474	15. 482	16. 932	16. 884	19. 036	20. 257	19. 206
Ma li	Inflation, end of period consumer prices	Index		ℹ	103 .00 1	108 .38 1	112 .80 0	107 .14 9	108 .79 4	112 .45 0	116 .48 4	119 .49 7	128 .38 7	130 .53 6	133 .07 3
Ma li	General government gross debt	Percent of GDP		ℹ	104 .92 9	91. 641	54. 205	49. 011	46. 203	52. 887	20. 288	21. 712	21. 595	24. 197	28. 312
Ma li	Current account balance	U.S. dollars	Billi ons	ℹ	- 0.2 56	- 0.3 21	- 0.0 99	- 0.2 96	- 0.3 92	- 0.4 66	- 0.2 49	- 0.4 91	- 1.1 17	- 0.6 72	- 0.7 86
Nig er	Gross domestic product, current prices	U.S. dollars	Billi ons	ℹ	1.6 72	1.8 15	2.0 74	2.6 45	2.9 01	3.3 75	3.6 49	4.2 97	5.3 95	5.2 73	5.5 77
Nig er	Gross domestic product per capita, current prices	U.S. dollars	Unit s	ℹ	155 .05 0	163 .30 3	180 .97 1	223 .84 9	238 .11 3	268 .68 6	281 .80 3	321 .82 3	391 .96 3	371 .56 7	381 .15 7

Niger	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		488.318	523.278	543.292	576.278	580.839	624.183	661.434	682.468	739.246	717.333	755.300
Niger	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.0012	0.0013	0.0013	0.0014	0.0013	0.0014	0.0014	0.0014	0.0014	0.0014	0.0014
Niger	Investment	Percent of GDP			12.341	13.000	14.903	16.333	14.593	23.094	23.589	22.839	32.291	32.953	47.000
Niger	Inflation, end of period consumer prices	Index			73.644	76.026	76.451	75.307	78.091	81.338	81.632	85.452	93.499	92.923	95.400
Niger	General government gross debt	Percent of GDP			88.781	85.098	88.860	69.878	58.849	51.640	15.764	15.880	13.935	15.777	17.592
Niger	Current account balance	U.S. dollars	Billions		-0.111	-0.093	-0.202	-0.198	-0.212	-0.301	-0.313	-0.352	-0.699	-1.513	-1.715
Nigeria	Gross domestic product, current prices	U.S. dollars	Billions		46.386	44.138	59.117	67.656	87.845	112.248	145.430	165.921	207.116	168.846	216.803
Nigeria	Gross domestic product per capita, current prices	U.S. dollars	Units		389.951	361.112	470.703	524.261	662.472	823.824	1,038.758	1,153.400	1,401.235	1,111.747	1,389.307
Nigeria	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		1,129.203	1,215.528	1,456.691	1,597.864	1,773.307	1,795.500	1,916.382	2,053.843	2,164.772	2,274.121	2,421.957
Nigeria	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.318	0.336	0.397	0.423	0.447	0.431	0.436	0.443	0.457	0.493	0.505
Nigeria	Investment	Percent of GDP			20.189	24.035	30.467	25.404	23.289	22.835	22.583	22.773	24.041	27.587	24.663
Nigeria	Inflation, end of period consumer prices	Index			33.931	39.528	44.338	54.895	60.389	67.373	73.100	77.900	89.700	102.200	114.200
Nigeria	Unemployment rate	Percent of total labor force			4.700	3.800	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500
Nigeria	General government gross debt	Percent of GDP			84.221	87.971	68.783	63.862	52.657	28.605	11.808	12.829	11.604	15.201	16.354
Nigeria	Current account balance	U.S. dollars	Billions		5.787	2.030	-7.690	-4.021	4.966	7.345	38.570	31.094	31.824	21.899	13.886
Senegal	Gross domestic product, current prices	U.S. dollars	Billions		4.693	4.882	5.352	6.872	8.042	8.723	9.367	11.301	13.350	12.789	12.877
Senegal	Gross domestic product per capita, current prices	U.S. dollars	Units		453.777	460.645	493.032	618.085	706.302	748.225	784.620	924.386	1,066.369	997.608	980.929
Senegal	Gross domestic product based on purchasing-power-parity	Current international	Units		1,273.	1,328.	1,326.	1,411.	1,469.	1,565.	1,617.	1,706.	1,757.	1,770.	1,819.

	(PPP) per capita GDP	nal dollar			021	657	656	663	806	479	107	224	797	311	222
Senegal	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		[i]	0.031	0.032	0.031	0.032	0.032	0.032	0.031	0.031	0.031	0.032	0.032
Senegal	Investment	Percent of GDP		[i]	21.545	19.835	18.940	25.875	25.988	28.495	28.166	33.976	34.131	27.853	29.813
Senegal	Inflation, end of period consumer prices	Index		[i]	81.413	84.712	85.969	84.690	86.137	87.362	90.778	96.386	100.493	97.115	101.281
Senegal	General government gross debt	Percent of GDP		[i]	74.450	71.501	68.419	54.701	47.508	45.660	23.010	24.471	24.992	31.959	37.951
Senegal	Current account balance	U.S. dollars	Billions	[i]	-0.328	-0.246	-0.323	-0.437	-0.552	-0.784	-0.887	-1.334	-1.908	-0.984	-1.067
Sierra Leone	Gross domestic product, current prices	U.S. dollars	Billions	[i]	0.645	0.801	0.933	0.985	1.066	1.214	1.423	1.664	1.952	1.856	1.905
Sierra Leone	Gross domestic product per capita, current prices	U.S. dollars	Units	[i]	152.507	183.347	205.545	208.204	216.340	237.636	270.012	306.960	351.066	325.663	325.761
Sierra Leone	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units	[i]	362.701	424.278	528.534	567.025	601.324	639.904	686.824	731.816	769.397	781.594	807.133
Sierra Leone	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent		[i]	0.004	0.004	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Sierra Leone	Investment	Percent of GDP		[i]	6.608	6.887	8.922	14.086	10.773	17.370	15.246	13.199	14.759	14.938	18.263
Sierra Leone	Inflation, end of period consumer prices	Index		[i]	508.383	525.829	509.633	567.150	648.770	733.760	794.390	903.720	1,014.390	1,123.730	1,330.460
Sierra Leone	General government gross debt	Percent of GDP		[i]	160.502	199.000	213.277	224.569	204.674	177.870	136.680	55.186	53.734	60.032	57.305
Sierra Leone	Current account balance	U.S. dollars	Billions	[i]	-0.056	-0.051	-0.019	-0.048	-0.062	-0.086	-0.080	-0.091	-0.224	-0.155	-0.186
Togo	Gross domestic product, current prices	U.S. dollars	Billions	[i]	1.299	1.334	1.481	1.677	1.940	2.117	2.205	2.527	3.177	3.167	3.194

	Subject Descriptor	Units	Scale		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Togo	Gross domestic product per capita, current prices	U.S. dollars	Units		242.104	241.278	260.553	287.430	324.014	344.581	349.977	391.248	479.716	466.337	458.785
Togo	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		685.900	669.586	655.606	684.573	696.520	755.292	791.474	812.866	829.408	842.695	858.037
Togo	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Togo	Investment	Percent of GDP			15.180	15.613	16.119	14.428	14.515	16.292	16.775	14.643	17.321	18.021	16.866
Togo	Inflation, end of period consumer prices	Index			76.745	82.005	83.278	81.835	85.042	89.694	91.039	94.111	103.776	101.254	108.291
Togo	General government gross debt	Percent of GDP			n/a	102.140	99.929	101.473	92.986	76.802	85.270	100.718	83.145	67.830	28.203
Togo	Current account balance	U.S. dollars	Billions		-0.112	-0.113	-0.118	-0.181	-0.194	-0.209	-0.186	-0.219	-0.304	-0.219	-0.252

Report for Selected Countries and Subjects

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															Shaded cells indicate IMF staff estimates

Country	Subject Descriptor	Units	Scale	Country/Series-specific Notes	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
China	Gross domestic product, current prices	U.S. dollars	Billions		1,198.478	1,324.814	1,453.833	1,640.962	1,931.646	2,256.919	2,712.917	3,494.235	4,519.950	4,990.528	5,878.257
China	Gross domestic product per capita, current prices	U.S. dollars	Units		945.597	1,038.036	1,131.802	1,269.829	1,486.019	1,726.054	2,063.871	2,644.563	3,403.526	3,738.952	4,382.136
China	Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	Current international dollar	Units		2,377.754	2,615.048	2,880.568	3,217.457	3,614.103	4,102.495	4,748.981	5,554.186	6,188.884	6,785.872	7,518.716
China	Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent			7.127	7.551	8.013	8.520	8.921	9.457	10.138	11.002	11.735	12.902	13.610
China	Investment	Percent of			35.	36.	37.	41.	43.	42.	42.9	41	44.	48.	48.

na		GDP				119	268	866	203	263	099	72	.738	046	243	774
China	Inflation, end of period consumer prices	Index		i	106.278	106.149	105.525	108.395	111.893	113.422	115.729	123.405	126.531	127.375	133.362
China	Unemployment rate	Percent of total labor force		i	3.100	3.600	4.000	4.300	4.200	4.200	4.100	4.000	4.200	4.300	4.100
China	General government gross debt	Percent of GDP		i	16.445	17.711	18.937	19.245	18.535	17.635	16.187	19.591	16.963	17.670	17.711
China	Current account balance	U.S. dollars	Billions	i	20.519	17.405	35.422	45.875	68.659	160.818	253.268	371.833	436.107	297.142	306.200

[edit] List of states by foreign exchange reserves

For consistency, forward currency swap contracts are not included in this list until they mature, figures that include them may be higher or lower than those listed here. IMF or other outstanding loans are not shown here, and if accounted for many nations would list lower.

Rank	Country/Monetary Authority	Foreign exchange reserves (Millions of USD)	Figures as of
—	World (sum of all countries)	N/A	--
1	People's Republic of China	2,622,000	Dec 2010[1]
2	Japan	1,096,185	Dec 2010[2]
-	Eurosystem (EU member states which have adopted the euro, incl. ECB)	789,891	Dec 2010[2]
3	Russia	479,379	Dec 2010[2]
4	Saudi Arabia	456,200	Dec 2010[1]
5	Republic of China (Taiwan)	382,800	Dec 2010 [1]
6	Brazil	297,696	Jan 2011[2]
7	India	297,334	Dec 2010[2]
8	Republic of Korea	291,571	Dec 2010[2]
9	Switzerland	270,517	Dec 2010[2]
-	Hong Kong	268,731	Dec 2010[2]
10	Singapore	225,754	Dec 2010[2]
11	Germany	216,598	Dec 2010[2]
12	Thailand	172,129	Dec 2010[2]
13	France	166,319	Dec 2010[2]
14	Italy	158,926	Dec 2010[2]
15	Algeria	150,100	Dec 2010[1]
16	United States	133,945	Jan 2011[2]
17	Mexico	117,413	Nov 2010[2]
18	Malaysia	108,100	Jan 2011[2]
19	Libya	107,300	Dec 2010[1]
20	United Kingdom	106,567	Dec 2010[2]
21	Indonesia	96,207	Dec 2010[2]
22	Poland	93,514	Dec 2010[2]
23	Turkey	85,968	Dec 2010[2]
24	Denmark	76,528	Dec 2010[2]
—	European Central Bank	75,887	Dec 2010[2]

ANNEX 2

	(ECB, not owned by any single EU member)		
25	Iran	75,060	Dec 2010[1]
26	Israel	71,284	Dec 2010[2]
27	Philippines	62,371	Dec 2010[2]
28	Canada	57,151	Dec 2010[2]
29	Argentina	52,190	Dec 2010[2]
30	Sweden	48,295	Dec 2010[2]
31	Romania	48,037	Dec 2010[2]
32	Netherlands	46,241	Dec 2010[2]
33	Norway	45,738	Dec 2010[2]
34	Iraq	45,680	Dec 2010[1]
35	Hungary	44,996	Dec 2010[2]
36	Peru	43,933	Jan 2011[2]
37	South Africa	43,834	Dec 2010[2]
38	Nigeria	43,360	Dec 2010[1]
39	Czech Republic	42,338	Dec 2010[2]
40	Australia	42,268	Dec 2010[2]
41	Lebanon	41,570	Dec 2010[1]
42	United Arab Emirates	39,100	Dec 2010[1]
43	Egypt	36,194	Dec 2010[2]
44	Ukraine	34,576	Dec 2010[2]
45	Spain	31,942	Dec 2010[2]
46	Venezuela	29,490	Dec 2010[1]
47	Kazakhstan	28,291	Dec 2010[2]
48	Colombia	28,078	Dec 2010[2]
49	Belgium	26,850	Dec 2010[2]
50	Chile	26,006	Dec 2010[2]
51	Morocco	22,885	Nov 2010[2]
52	Vietnam	19,200	Dec 2010[2]
53	Kuwait	22,420	Dec 2010[1]
54	Qatar	22,410	Dec 2010[1]
55	Austria	22,299	Dec 2010[2]
56	Portugal	21,002	Dec 2010[2]
57	Macau	18,730	Mar 2010[3]
58	Bulgaria	17,339	Dec 2010[2]
59	New Zealand	16,724	Dec 2010[2]
60	Pakistan	16,100	Dec 2010[2]
61	Croatia	14,573	Nov 2010[2]

62	Jordan	13,637	Dec 2010[2]
63	Bangladesh	10,790	Dec 2010[1]
64	Finland	9,561	Dec 2010[2]
65	Bolivia	8,739	Dec 2010[1]
66	Tunisia	9,549	Dec 2010[2]
67	Trinidad and Tobago	9,659	Dec 2010[1]
68	Uruguay	7,744	Dec 2010[2]
69	Latvia	7,605	Dec 2010[2]
70	Lithuania	6,836	Dec 2010[2]
71	Azerbaijan	6,330	Dec 2010[1]
72	Greece	6,316	Dec 2010[2]
73	Iceland	5,798	Dec 2010[2]
74	Belarus	5,705	Nov 2010[2]
75	Sri Lanka	5,630	Dec 2010[1]
76	Costa Rica	4,627	Dec 2010[2]
77	Paraguay	4,082	Dec 2010[1]
78	Cambodia	3,840	Dec 2010[1]
79	El Salvador	2,883	Dec 2010[2]
80	Honduras	2,699	Dec 2010[2]
81	Estonia	2,568	Dec 2010[2]
82	Myanmar	3,762	Dec 2010[1]
83	Georgia	2,265	Dec 2010[2]
84	Slovakia	2,166	Dec 2010[2]
85	Ireland	2,101	Nov 2010[2]
86	Armenia	1,859	Dec 2010[2]
87	Kyrgyzstan	1,716	Dec 2010[2]
88	Moldova	1,611	Nov 2009[2]
89	Cyprus	1,141	Dec 2010[2]
90	Slovenia	1,073	Dec 2010[2]
91	Luxembourg	851	Dec 2010[2]
92	Laos	576	Dec 2010[1]
93	Malta	541	Dec 2010[2]

Rank 2010	Country	Index								
		2010[15]	2009[16]	2008[17]	2007[18]	2006[19]	2005[20]	2004[21]	2003	2002
1	Denmark	9.3	9.3	9.3	9.4	9.5	9.5	9.5	9.5	9.5
1	New Zealand	9.3	9.4	9.3	9.4	9.6	9.6	9.5	9.5	9.4
1	Singapore	9.3	9.2	9.2	9.3	9.2	9.3	9.4	9.4	9.4
4	Finland	9.2	8.9	9	9.4	9.6	9.6	9.7	9.7	9.9
4	Sweden	9.2	9.2	9.3	9.3	9.2	9.2	9.3	9.3	9
6	Canada	8.9	8.7	8.7	8.7	8.5	8.4	8.7	9	8.9
7	Netherlands	8.8	8.9	8.9	9	8.7	8.6	8.9	9	8.8
8	Switzerland	8.7	9	9	9	9.1	9.1	8.8	8.5	8.4
8	Australia	8.7	8.7	8.7	8.6	8.7	8.8	8.8	8.6	8.5
10	Norway	8.6	8.6	7.9	8.7	8.8	8.9	8.8	8.5	8.6
11	Iceland	8.5	8.7	8.9	9.2	9.6	9.7	9.6	9.4	9.2
11	Luxembourg	8.5	8.2	8.3	8.4	8.6	8.5	8.7	9	8.7
13	Hong Kong	8.4	8.2	8.1	8.3	8.3	8.3	8	8.2	7.9
14	Ireland	8	8	7.7	7.5	7.4	7.4	7.5	6.9	7.5
15	Austria	7.9	7.9	8.1	8.1	8.6	8.7	8	7.8	7.8
15	Germany	7.9	8	7.9	7.8	8	8.2	7.7	7.3	7.4
17	Barbados	7.8	7.4	7	6.9	6.7	6.9			
17	Japan	7.8	7.7	7.3	7.5	7.6	7.3	7	7.1	7.1
19	Qatar	7.7	7	6.5	6	6	5.9	5.6		
20	United Kingdom	7.6	7.7	7.7	8.4	8.6	8.6	8.6	8.7	8.3
21	Chile	7.2	6.7	6.9	7	7.3	7.3	7.4	7.5	7.5
22	Belgium	7.1	7.1	7.3	7.1	7.3	7.4	7.6	7.1	6.6
22	United States	7.1	7.5	7.3	7.2	7.3	7.6	7.5	7.7	7.6
24	Uruguay	6.9	6.7	6.9	6.7	6.4	5.9	5.5	5.1	5.1
25	France	6.8	6.9	6.9	7.3	7.4	7.5	6.9	6.3	6.7
26	Estonia	6.5	6.6	6.6	6.5	6.7	6.4	5.5	5.6	5.6
27	Slovenia	6.4	6.6	6.7	6.6	6.4	6.1	5.9	6	5.2
28	Cyprus	6.3	6.6	6.4	5.3	5.6	5.7	5.4	6.1	
28	United Arab	6.3	6.5	5.9	5.7	6.2	6.2	6.1	5.2	
30	Israel	6.1	6.1	6	6.1	5.9	6.3	6.4	7	7.3
30	Spain	6.1	6.1	6.5	6.7	6.8	7	6.9	7.1	7
32	Portugal	6	5.8	6.1	6.5	6.6	6.5	6.6	6.3	6.3
33	Puerto Rico	5.8	5.8	5.8						
33	Botswana	5.8	5.6	5.8	5.4	5.6	5.9	6	5.7	6.4
33	Taiwan	5.8	5.6	5.7	5.7	5.9	5.9	5.6	5.7	5.6
36	Bhutan	5.7	5	5.4	5					
37	Malta	5.6	5.2	5.8	5.8	6.4	6.4			
38	Brunei	5.5	5.5							
39	South Korea	5.4	5.5	5.6	5.1	5.1	5	4.5	4.3	4.5
39	Mauritius	5.4	5.4	5.5	4.7	5.1	4.2	4.1	4.4	4.5
41	Oman	5.3	5.5	5.5	4.7	5.4	6.3	6.1	6.3	
41	Costa Rica	5.3	5.3	5.1	5	4.1	4.2	4.9	4.3	4.5
41	Poland	5.3	5	4.6	4.2	3.7	3.4	3.5	3.6	4
44	Dominica	5.2	5.9	6	5.6	4.5	3	2.9	3.3	3.2

Rank 2010	Country	Index								
		2010	2009	2008	2007	2006	2005	2004	2003	2002
91	Swaziland	3.2	3.6	3.6	3.3	2.5	2.7			
91	Guatemala	3.2	3.4	3.1	2.8	2.6	2.5	2.2	2.4	2.5
91	Sri Lanka	3.2	3.1	3.2	3.2	3.1	3.2	3.5	3.4	3.7
91	Zambia	3.2	2.9	1.9	2.3	2.5	2.7	2.8	2.5	
91	Kiribati	3.2	2.8	3.1	3.3	3.7				
98	Burkina Faso	3.1	3.6	3.5	2.9	3.2	3.4			
98	Mexico	3.1	3.3	3.6	3.5	3.3	3.5	3.6	3.6	3.6
98	Egypt	3.1	2.8	2.8	2.9	3.3	3.4	3.2	3.3	3.4
101	Dominican Republic	3	3	3	3	2.8	3	2.9	3.3	3.5
101	Tonga	3	3	2.4	1.7					
101	Gambia	3	3	2.8	2.6	2.6	2.6	2.6	2.5	2.6
101	São Tomé and	3	2.8	2.7	2.7					
105	Moldova	2.9	3.3	2.9	2.8	3.2	2.9	2.3	2.4	2.1
105	Senegal	2.9	3	3.4	3.6	3.3	3.2	3	3.2	3.1
105	Argentina	2.9	2.9	2.9	2.9	2.9	2.8	2.5	2.5	2.8
105	Kazakhstan	2.9	2.7	2.2	2.1	2.6	2.6	2.2	2.4	2.3
105	Algeria	2.9	2.8	3.2	3	3.1	2.8	2.7	2.6	
110	Benin	2.8	2.9	3.1	2.7	2.5	2.9	3.2		
110	Gabon	2.8	2.9	3.1	3.3	3	2.9	3.3		
110	Indonesia	2.8	2.8	2.6	2.3	2.4	2.2	2	1.9	1.9
110	Bolivia	2.8	2.7	3	2.9	2.7	2.5	2.2	2.3	2.2
110	Solomon Islands	2.8	2.8	2.9	2.8					
110	Kosovo	2.8								
116	Ethiopia	2.7	2.6	2.4	2.4	2.2	2.3	2.5	3.5	
116	Mali	2.7	3.1	2.7	2.8	2.9	3.2	3		
116	Mongolia	2.7	3	3	2.8	3	3			
116	Vietnam	2.7	2.7	2.6	2.6	2.6	2.6	2.4	2.4	
116	Guyana	2.7	2.6	2.6	2.5	2.5				
116	Tanzania	2.7	3	3.2	2.9	2.9	2.8	2.5	2.7	
116	Mozambique	2.7	2.6	2.8	2.8	2.8	2.8	2.7		
123	Armenia	2.6	2.9	3	2.9	2.9	3.1	3		
123	Madagascar	2.6	3.4	3.2	3.1	2.8	3.1	2.6	1.7	
123	Niger	2.6	2.8	2.6	2.3	2.4	2.2			
123	Eritrea	2.6	2.6	2.8	2.9	2.6	2.6			
127	Belarus	2.5	2	2.1	2.1	2.6	3.3	4.2	4.8	
127	Syria	2.5	2.1	2.4	2.9	3.4	3.4	3.4		
127	Lebanon	2.5	3	3	3.6	3.1	2.7	3		
127	Nicaragua	2.5	2.5	2.6	2.6	2.6	2.7	2.6	2.5	
127	Ecuador	2.5	2	2.1	2.3	2.5	2.4	2.2	2.2	
127	Timor-Leste	2.5	2.2	2.6	2.6					
127	Uganda	2.5	2.6	2.8	2.7	2.5	2.6	2.2	2.1	
134	Azerbaijan	2.4	1.9	2.1	2.4	2.2	1.9	1.8	2	
134	Nigeria	2.4	2.7	2.2	2.2	1.9	1.6	1.4	1.6	
134	Honduras	2.4	2.6	2.5	2.5	2.6	2.3	2.3	2.7	

ANNEX 3

Rank	Country								
45	e Verde	5.1	5.1	5.1	4.9				
46	cau	5	5.3	5.4	5.7	6.6			
46	nuania	5	4.9	4.6	4.8	4.8	4.8	4.6	4.7 4.8
48	hrain	4.9	5.1	5.4	5	5.7	5.8	5.8	6.1
49	chelles	4.8	4.8	4.8	4.5	3.6	4	4.4	
50	ngary	4.7	5.1	5.1	5.3	5.2	5	4.8	4.8 4.9
50	dan	4.7	5	5.1	4.7	5.3	5.7	5.3	4.6 4.5
50	di Arabia	4.7	4.3	3.5	3.4	3.3	3.4	3.4	4.5
53	ch Republic	4.6	4.9	5.2	5.2	4.8	4.3	4.2	3.9 3.7
54	wait	4.5	4.1	4.3	4.3	4.8	4.7	4.6	5.3
54	uth Africa	4.5	4.7	4.9	5.1	4.6	4.5	4.6	4.4 4.8
56	laysia	4.4	4.5	5.1	5.1	5	5.1	5	5.2 4.9
56	mibia	4.4	4.5	4.5	4.5	4.1	4.3	4.1	4.7 5.7
56	key	4.4	4.4	4.6	4.1	3.8	3.5	3.2	3.1 3.2
59	via	4.3	4.5	5	4.8	4.7	4.2	4	3.8 3.7
59	vakia	4.3	4.5	5	4.9	4.7	4.3	4	3.7 3.7
59	nisia	4.3	4.2	4.4	4.2	4.6	4.9	5	4.9 4.8
62	atia	4.1	4.1	4.4	4.1	3.4	3.4	3.5	3.7 3.8
62	ana	4.1	3.9	3.9	3.7	3.3	3.5	3.6	3.3 3.9
62	cedonia	4.1	3.8	3.6	3.3	2.7	2.7	2.7	2.3
62	noa	4.1	4.5	4.4	4.5				
66	anda	4	3.3	3	2.8	2.5	3.1		
67	ly	3.9	4.3	4.8	5.2	6.2	6.2	5.2	
68	orgia	3.8	4.1	3.9	3.4	2.8	2.3	2	1.8 2.4
69	pa	3.7	4.4	4.3	4.2	3.5	3.8	3.7	4.6
69	ntenegro	3.7	3.9	3.4	3.3				
69	mania	3.7	3.8	3.8	3.7	3.1	3	2.9	2.8 2.6
69	zil	3.7	3.7	3.5	3.5	3.3	3.7	3.9	3.9 4
73	garia	3.6	3.8	3.6	4.1	4	4	4.1	3.9 4
73	alvador	3.6	3.4	3.9	4	4	4.2	3.7	3.4 3.2
73	nama	3.6	3.4	3.4	3.2	3.1	3.5	3.7	3.4 3
73	nidad and	3.6	3.6	3.6	3.4	3.2	3.8	4.2	4.6 4.9
73	nuatu	3.6	3.2	2.9	3.1				
78	eece	3.5	3.8	4.7	4.6	4.4	4.3	4.3	4.3 4.2
78	ombia	3.5	3.7	3.8	3.8	3.9	4	3.8	3.7 3.6
78	ru	3.5	3.7	3.6	3.5	3.3	3.5	3.5	3.7 3.4
78	na	3.5	3.6	3.6	3.5	3.3	3.2	3.4	3.4 3.5
78	iland	3.5	3.4	3.5	3.3	3.6	3.8	3.6	3.3 3.2
78	bia[22]	3.5	3.4	3.4	3	2.8	2.7	2.3	
78	otho	3.5	3.3	3.2	3.3	3.2	3.4		
85	lawi	3.4	3.3	2.8	2.7	2.7	2.8	2.8	2.8 2.9
85	rocco	3.4	3.3	3.5	3.5	3.2	3.2	3.2	3.3 3.7
87	ia	3.3	3.4	3.4	3.5	3.3	2.9	2.8	2.8 2.7
87	ania	3.3	3.2	3.4	2.9	2.6	2.4	2.5	2.5 2.5
87	eria	3.3	3.1	2.4	2.1	2.2			
87	maica	3.3	3	3.1	3.3	3.7	3.6	3.3	3.8 4
91	nia and	3.2	3.2	3.3	2.9	2.9	3.1	3.3	
91	bouti	3.2	3	2.9					

Rank	Country								
134	to	2.4	2.7	2.3	2.4				
134	ngladesh	2.4	2.1	2	2	1.7	1.5	1.3	1.2
134	lippines	2.4	2.3	2.5	2.5	2.5	2.6	2.5	2.6
134	rra Leone	2.4	1.9	2.1	2.2	2.4	2.3	2.2	
134	raine	2.4	2.5	2.7	2.8	2.6	2.2	2.3	2.4
134	mbabwe	2.4	1.8	2.1	2.4	2.6	2.3	2.4	2.7
143	kistan	2.3	2.5	2.4	2.2	2.1	2.1	2.5	2.6
143	ldives	2.3	2.8	3.3					
143	uritania	2.3	2.8	2.6	3.1				
146	meroon	2.2	2.3	2.4	2.3	2.2	2.1	1.8	2.2
146	Nepal	2.2	2.7	2.5	2.5	2.5	2.8		
146	nya	2.2	2.6	2.5	2.7	2.5	2.5	2.1	
146	te d'Ivoire	2.2	2	2.1		1.9	2	2.1	2.7
146	raguay	2.2	2.4	2.4	2.6	2.1	1.9	1.6	1.7
146	men	2.2	2.3	2.5	2.6	2.7	2.4	2.6	2.4
146	ti	2.2	1.4	1.6	1.8	1.8	1.5	1.5	2.2
146	n	2.2	2.3	2.5	2.7	2.9	2.9	3	
154	moros	2.1	2.5	2.6					
154	ssia	2.1	2.1	2.3	2.5	2.4	2.8	2.7	2.7
154	nya	2.1	2.1	2.1	2.2	2.1	2.1	1.9	1.9
154	ua New Guinea	2.1	2	2	2.4	2.3	2.6	2.1	
154	mbodia	2.1	1.8	2	2.3	2	1.8	1.5	1.3 1.2
154	ntral African	2.1	2	2	2.4				
154	os	2.1	2	1.9	2.6	3.3			
154	ikistan	2.1	2	2.1	2.2	2.1	2	1.8	
154	public of the Congo	2.1	1.9	2.1	2.2	2.3	2.3	2.2	
154	inea-Bissau	2.1	1.9	2.2					
164	mocratic Republic	2	1.8	1.9	2	2.1	2		
164	inea	2	1.6	1.9	1.9				
164	gyzstan	2	1.8	2.1	2.2	2.3	2.2	2.1	
164	nezuela	2	1.9	2	2.3	2.3	2.3	2.4	2.5
168	gola	1.9	2.2	1.9	2.2	2	2	1.8	1.7
168	atorial Guinea	1.9	1.7	1.9	2.1	1.9			
170	rundi	1.8	1.9	2.5	2.4	2.3			
171	ad	1.7	1.6	1.8	2	1.7	1.7		
172	dan	1.6	1.6	1.8	2	2.1	2.2	2.3	
172	rkmenistan	1.6	1.8	2	2.2	1.8	2		
172	bekistan	1.6	1.8	1.7	2.7	2.2	2.3	2.4	2.9
175	n	1.5	1.3	1.5	1.9	2.2	2.1	2.2	
176	hanistan	1.4	1.5	1.8		2.5			
176	yanmar	1.4	1.3	1.4	1.9	1.8	1.7	1.6	
178	malia	1.1	1	1.4		2.1			
~	lize		2.9	3	3.5	3.7	3.8	4.5	
~	renada			3.4	3.5				
~	Saint Lucia		7	7.1	6.8				
~	renadines		6.4	6.5	6.1				

These numbers are adjusted for PPP. Earning 1.25 US dollars a day in India, for instance, would correspond to earning around 6.25 U

These numbers should be taken as measures of extreme poverty, not economic discomfort

Population living under 1.25 and 2 dollar (PPP) a day (%)		
Country	≤ $1.25[1]	≤ $2[2]
ania	2	7.9
eria	6.8[3]	23.6[3]
gola	54.3	70.2
Argentina	3.4	7.3
Armenia	3.7	21
Azerbaijan	<2	<2
Bangladesh	49.6	81.3
Belarus	<2	<2
nin	47.3	75.3
utan	26.2	49.5
ivia	11.9	21.9
Bosnia and	<2	<2
swana	31.2[3]	49.4[3]
zil	5.2	12.7
garia	<2	2.4
kina Faso	56.5	81.2
undi	81.3	93.5
mbodia	25.8	57.8
meroon	32.8	57.7
pe Verde	20.6	40.2
ntral African	62.4	81.9
ad	61.9	83.3
ile	<2	2.4
na, People's	15.9	36.3
ombia	16	27.9
moros	46.1	65
go,	59.2	79.6
go, Republic	54.1	74.4
sta Rica	<2	4.3
te d'Ivoire	23.3	46.8
oatia	<2	<2
ch Republic	<2[3]	<2[3]
outi	18.8	41.2
ominican	4.4	12.3
ador	4.7	12.8
pt	<2	18.5
Salvador	6.4	13.2
onia	<2	<2
iopia	39	77.6
on	4.8	19.6
mbia	34.3	56.7
orgia	13.4	30.4
ana	30	53.6
atemala	11.7	24.3
nea	70.1	87.2
Guinea-Bissau	48.8	77.9
yana	7.7[3]	16.8[3]
ti	54.9	72.1

Population living below national poverty line (%)					
Country	UNDP[5]	CIA[6]	Year	Other	Year
hanistan	42	36	FY08/09	N/A	N/A
ania	18.5	25	2004 est.	25	2002[7]
eria	22.6	23	2006 est.	N/A	N/A
dorra	N/A	8	2008	N/A	N/A
gola	N/A	40.5	2006 est.	N/A	N/A
Anguilla	N/A	23	2002	N/A	N/A
Argentina	N/A	13.9	Jan.-Jun. 2009	11.3	2009[8][9]
Armenia	50.9	26.5	2006 est.	51	2001[7]
stria	N/A	6	2008	N/A	N/A
Azerbaijan	49.6	11	2009 est.	50	2001[7]
Bahamas, The	N/A	9.3	2004	N/A	N/A
ngladesh	49.8	36.3	2008 est.	50	2000[7]
larus	17.4	27.1	2003 est.	18	2002[7]
gium	N/A	15.2	2007 est.	N/A	N/A
ize	N/A	33.5	2002 est.	N/A	N/A
nin	39	37.4	2007 est.	N/A	N/A
rmuda	N/A	19	2000	N/A	N/A
utan	N/A	23.2	2008	N/A	N/A
ivia	64.6	60	2006 est.	54	2007[8]
Bosnia and Herzegovina	19.5	25	2004 est.	20	2002[7]
swana	N/A	30.3	2003	N/A	N/A
zil	21.5	26	2008	24.9	2009[8]
garia	12.8	14	2008	13	2001[7]
kina Faso	46.4	46.4	2004	46	2003[7]
rma	N/A	32.7	2007 est.	N/A	N/A
undi	68	68	2002 est.	N/A	N/A
mbodia	35	31	2004	35	2004[7]
meroon	40.2	48	2000 est.	40	2001[7]
Canada	N/A	10.8	2005[10]	4.9	2004[11]
pe Verde	N/A	30	2000	N/A	N/A
ad	43.4	80	2001 est.	N/A	N/A
ile	17	18.2	2005	11.5	2009[8]
eople's Republic of	2.8	2.8	2007	N/A	N/A
ombia	64	46.8	2008	45.7	2009[8]
moros	N/A	60	2002 est.	N/A	N/A
ngo, Democratic	71.3	N/A		N/A	
ngo, Republic of the	42.3	N/A		N/A	N/A
sta Rica	23.9	16	2006 est.	18.9	2009[8]
te d'Ivoire	N/A	42	2006 est.	N/A	N/A
oatia	11.1	17	2008	N/A	N/A
nmark	N/A	12.1	2007	N/A	N/A
outi	N/A	42	2007 est.	N/A	N/A
ominica	N/A	30	2002 est.	N/A	N/A
ominican Republic	42.2	42.2	2004	41.1	2009[8]
ador	45.2	35.1	2008	40.2	2009[8][9]
pt	16.7	20	2005 est.	17	1999-2000[7]
Salvador	37.2	30.7	2006 est.	47.9	2009[8]
itrea	53	50	2004 est.	N/A	N/A

ANNEX 4

Country		
Honduras	18.2	29.7
Hungary	<2	<2
India	37	75.6
Indonesia	29.4	60
Iran	<2	8
Jamaica	<2	5.8
Jordan	<2	3.5
Kazakhstan	<2	<2
Kenya	19.7	39.9
Kyrgyzstan	3.4	27.5
Laos	44[4]	76.8[4]
Latvia	<2	<2
Lesotho	43.4	62.2
Liberia	83.7	94.8
Lithuania	<2	<2
Macedonia	<2	5.3
Madagascar	67.8	89.6
Malawi	73.9	90.4
Malaysia	<2	7.8
Mali	51.4	77.1
Mauritania	21.2	44.1
Mexico	4	8.2
Moldova	2.4	11.5
Mongolia	2.2	13.6
Montenegro	<2	<2
Morocco	2.5	14
Mozambique	74.7	90
Namibia	49.1[3]	62.2[3]
Nepal	55.1	77.6
Nicaragua	15.8	31.9
Niger	65.9	85.6
Nigeria	64.4	83.9
Pakistan	22.6	60.3
Panama	9.5	17.9
Papua New	35.8[3]	57.4[3]
Paraguay	6.5	14.2
Peru	7.7	17.8
Philippines	22.6	45
Poland	<2	<2
Romania	<2	4.1
Russia	<2	<2
Rwanda	76.6	90.3
Saint Lucia	20.9[3]	40.6[3]
Senegal	33.5	60.4
Serbia	<2	<2
Seychelles	<2	<2
Sierra Leone	53.4	76.1
Slovakia	<2[3]	<2[3]
Slovenia	<2	<2
South Africa	26.2	42.9
Sri Lanka	14	39.7
Suriname	15.5[3]	27.2[3]

Country					
Estonia	8.9	19.5	2007	N/A	N/A
Ethiopia	44.2	38.7	FY05/06 est.	44	1999-2000[7]
Fiji	N/A	25.5	FY90/91	N/A	N/A
France	N/A	6.2	2004	N/A	N/A
The Gambia	61.3	N/A	N/A	61	2003[7]
Gaza Strip	N/A	70	2009 est.	N/A	N/A
Georgia	54.5	31	2006	54	2003[7]
Germany	N/A	11	2001 est.	N/A	N/A
Ghana	28.5	28.5	2007 est.	28	2005-6[7]
Greece	N/A	20	2009 est.	N/A	N/A
Greenland	N/A	9.2	2007	N/A	N/A
Grenada	N/A	32	2000	N/A	N/A
Guam	N/A	23	2001 est.	N/A	N/A
Guatemala	56.2	56.2	2004 est.	54.8	2006[8]
Guinea	40	47	2006 est.	N/A	N/A
Guinea-Bissau	65.7	N/A	N/A	66	2002[7]
Haiti	65	80	2003 est.	N/A	N/A
Honduras	50.7	65	2008	68.9	2007[8]
Hungary	17.3	12	2010 est.	N/A	N/A
India	28.6	25	2007 est.	29	1999-2000[7]
Indonesia	16	17.8	2006	17	2004[7]
Iran	N/A	18	2007 est.	N/A	N/A
Ireland	N/A	4.2	2008 est.	6.8	2004 est.[12]
Israel	N/A	23.6	2007[13]	N/A	N/A
Jamaica	18.7	14.8	2003 est.	19	2000[7]
Jordan	14.2	14.2	2002	14	2002[7]
Kazakhstan	15.4	12.1	2008	15	2002[7]
Kenya	52	50	2000 est.	N/A	N/A
Korea, South	N/A	15	2003 est.	N/A	N/A
Kosovo	N/A	35	2007 est.	N/A	N/A
Kyrgyzstan	43.1	40	2004 est.	43	2005[7]
Laos	33	26	2009 est.	33	2003[7]
Latvia	5.9	N/A	N/A	6	2004[7]
Lebanon	N/A	28	1999 est.	N/A	N/A
Lesotho	68	49	1999	N/A	N/A
Liberia	N/A	80	2000 est.	N/A	N/A
Libya	N/A	7.4	2005 est.	N/A	N/A
Lithuania	N/A	4	2003	N/A	N/A
Macedonia, Republic of	21.7	28.7	2009	29.4	2007[14]
Madagascar	71.3	50	2004 est.	N/A	N/A
Malawi	65.3	53	2004	N/A	N/A
Malaysia	15.5	5.1	2002 est.	N/A	N/A
Maldives	N/A	16	2008	N/A	N/A
Mali	63.8	36.1	2005 est.	N/A	N/A
Mauritania	46.3	40	2004 est.	46	2000[7]
Mauritius	10.6	8	2006 est.	N/A	N/A
Mexico	17.6	18.2	2008[15]	19.8	2008[8]
Micronesia, Federated	N/A	26.7	2000	N/A	N/A
Moldova	48.5	29.5	2005	48	2002[7]
Mongolia	36.1	36.1	2004	36	2002[7]
Montenegro	N/A	7	2007 est.	N/A	N/A
Morocco	19	15	2007 est.	N/A	N/A