# Structure and Dynamic of Economy and Its Links with Population Well-being in Burkina Faso from 1990 to 2015

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***Authors' contributions***

*This work was carried out in collaboration between both authors. Author DB conceptualized the study and data analysis. He also did interpretation of results and wrote the first draft of manuscript. Author LD did critical review and comments on the manuscript. Author DB finalized the manuscript.*

## ABSTRACT

The main objective of this paper is to investigate the structure and dynamic of Burkina Faso's economy during the last 25 years (1990-2015) and to know in what extent the economic growth saved during this period contributed to improve the living conditions of the population. To respond to these questions we used data of national account and data from five household surveys (EP I 1994, EP II 1998, EBCVM 2003, EICVM 2009, EMC 2014). All data are produced by National Institute of Statistic and Demography (INSD). The methodology used is descriptive analysis by conducting an univariate and bivariate analysis and the statistical approach of Kakwani.
The results indicate that during the period, the annual average growth observed varies from 1.9 percent in 2000 to 8.7 percent in 2006. However, for Gross Domestic Product, we have two main findings: (i) 2000 and 2009 have negative growth rate (-1.5% and 0.5% respectively); (ii) For the other year of the period, the growth rate varied between 1.2 percent and 5.3 percent. Globally, we observe that for all years, the annual growth rate for GDP is higher than annual growth rate for GDP per capita.

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The main sector in terms of contribution to Gross domestic Product between 2000 and 2012 is the tertiary sector regardless of the year of the period. Even if, it is not easy to measure the contribution of informal sector to the economy, the analysis of available data indicates that its contribution is estimated to more than 48 percent. Despite the economic growth saved, we have not observed improvement in the living conditions of population between 1990 and 2009 according the poverty indicators. Moreover, poverty increased after 1994 and the country has not yet managed to reach level observed in 1994. After 2009, poverty rose sharply to 40% in 2014.

In the light of these findings, the implementation of economic policies and socio-economic programs that are likely to promote pro-poor economic growth would be more effective than a high growth policy if we want to improve the living conditions of the most disadvantaged. Furthermore, as the country has undertaken to have advantage of the demographic dividend, it is important to develop appropriate economic policies to achieve structural transformation of economy of Burkina Faso.

## 1. INTRODUCTION

The question for sustainable economic growth remains one of the most studied topic in the world for economists and policy makers since Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* was published in 1776 [1]. To reach this objective of economic growth, the structure of economy is one of elements on which, we must operate deep transformations. In this way, Kuznets [2] indicated that sustained economic growth cannot happen without structural changes. All countries that have failed to achieve structural transformation remain poor [1,3]. The structural transformation means that countries have to diversify away from agriculture and the production of traditional goods into manufacturing and other modern activities.

The structure is the composition and patterns of components of the macro-economic aggregates while the process involves both description and analysis to identify structural change within economies. Three sectors are generally identified to understand the distribution of economic activities: primary, secondary and tertiary but, in developed countries, several authors pointed the importance of the tertiary sector and its strong sources of heterogeneity and proposed quaternary sector. Quaternary sector is defined [4-6] as the sector characterized by action to design, create, interpret, organize, control and pass with the help of science and technology giving these acts economic value.

Economic analysts have developed several methodologies to measure, interpret and understand structural change. Among these methodologies, we have those which examine the key sector analysis, those interested to sector composition and economic growth, structural decomposition analyses, and; spatial structural convergence. These methodologies manifest an improved understanding of the relationship among sector composition, structural change and economic development.

According to economic theories and empirical studies [7], there are four blocks of variables determining the level and evolution of economic growth: (i) The stock of physical capital;(ii) The stock of human capital; (iii) The environment variables such as climate change, the international economic environment, the domestic political environment, demographic environment in which the state has a small footprint; (iv) Policy variables such as macroeconomic and sectorial policies. Capital stocks are state variables. The environment variables and economic policy are control variables. A steady state of the economy and a certain economic growth rate can be set from the control variables.

Burkina Faso is one of Sub-Saharan Africa countries where the rural population represents 77 percent [8]. It is a developing country where at least three quarter of labor force is in the agricultural area. In 2000, Burkina Faso adopted a resolution in New York of the United Nations (UN) General Assembly, called "Millennium Declaration". One of the objectives of this statement was to reduce poverty by half between 1990 and 2015, the percentage of people living on less than a dollar a day. Thus, the commitment of the Government of Burkina Faso should improve the living conditions of populations. To achieve this commitment the country and its partners have made

arrangements with the strategic framework for poverty reduction (2000-2010). Burkina Faso also developed and is implementing Accelerated Growth Strategy and Sustainable Development (2011-2015).

Many policies have been implemented since 1990. One the objectives of these policies were to reach a sustainable economic growth: Around 3% to 4% between 1990 and 1999 and at least 7% from 2000 to 2010 [9-12]. The aim of the last policy is achieve the economic growth rate of 10% between 2011 and 2015. Out of the last policy that is always implementing, the expected economic growth level was not achieved but the country achieved very significant results. The question to be asked is to what extent the measures taken by the country and its development partners to improve economic growth have impacted the living conditions of the populations.

As indicate most studies, the structure of economy is one of the most import factors of economic growth. Therefore, the main objective of this paper is to investigate the structure of Burkina Faso's economy to better understand the factors supporting its growth. This paper will be organized in six sections: in the introduction, we present the global context of an economic structure followed by economy policy and structural reform; links between economic growth and population well-being. In the fourth section, we develop the methodological approach and data used. The fifth section of the paper focuses on the main results of the study and the last section presents the conclusions and perspectives.

## 2. ECONOMIC POLICY AND STRUCTURAL REFORMS

In 1990, Burkina Faso organized a national conference on economy after which a first structural adjustment program for the triennium 1991-1993 was defined. The results of this program saw the value and the necessity to continue to deepen the reforms. This justified new programs for the periods 1994-1996, 1997-1999 with the approval and financial support of International Monetary Fund and World Bank.

Burkina Faso takes into account the human development through six commitments. This strategy of sustainable human development is the subject of the Letter of Intent for Sustainable Human Development Policy 1995-2005. The

Strategy Note for the country adopted in 1997 defined the coherent framework of cooperation between Burkina Faso and the United Nations System. The two documents reflect the will of the authorities to bring the human dimension at the center of development based on the achievement of sustained growth, equitable, optimal development of human resources, the emergence of a new governance and better management of natural resources.

These programs are aimed at restoring internal and external economic and financial balances in order to increase the competitiveness of the national economy and build the foundations for sustainable economic and social development. In the medium term, this was to achieve a real GDP growth rate of around 3% to 4% per year and per capita income of 1% per year and limit the rate of inflation measured by the price index for African consumption by 3% per year on average [9,11,12]. To achieve this, the Government relied on a strategy built around a number of measures including improved management of public finances; increased agricultural production; stimulating investment and private initiative. The implementation of these programs has enabled a GDP growth of 4.5% on average per year over the 1991-1999 period but with irregularities.

From 2000 till 2009, two programs to reduce poverty were implemented: the strategic framework for poverty reduction for the period 2000-2004, which was then revised and extender to cover the period 2005-2010.These strategic policies are a global government strategy to reduce poverty in Burkina Faso and are guided by seven principles including the promotion of good governance. One of the objectives of the two policy documents are to achieve strong economic growth, sustainable and better distributed. However, the average economic growth for the country during this period was about 5% [9,11,12]. This level was well appreciated but it remains below the expectations according the evaluation results of policies for which the economic growth expected was at least 7%.

In the same time, the country has undertaken huge structural reforms. Since 1995, Burkina Faso has made great progress in its structural reforms while having managed to own the process. Indeed, in order to promote the business environment, the Chamber of Commerce and Industry was reorganized as business law was modernized based on the

principles of the Organization for the Harmonization of African Law Business (OHADA).

In order to promote transparency and participation, the cotton sector was reformed in an original way, in the sense of a producer involvement in the management of the national cotton company (SOFITEX). The reform of the cotton sector in 2007 enabled the creation of a smoothing fund, with support from the World Bank. Funding was sought from all partners of Burkina Faso, to allow the fund to stabilize the income of producers.

Furthermore, a first privatization program was initiated in 1991 and which envisaged the withdrawal of 45 State medium-sized companies. The authorities have done a positive assessment of this first wave of privatization that indicated that on December 1999, the program brought to the state budget XOF 10.8 billion and allowed a reduction in subsidies from XOF 20.5 billion in 1991 to XOF 1.4 billion in 1999. Socially, the privatized companies retained their labor force and even increased by 135 jobs [13], but liquidations engendered the loss of 1,047 jobs. The authorities undertook in 2001 a new series of privatizations that affected this time-sensitive infrastructure sector. Two main groups were identified where the State was going to make a partial withdrawal from these enterprises, and those for which the total disengagement was envisaged.

The financial system is underdeveloped but has undergone major reforms since 1991, when the State committed to the Bretton Woods institutions to withdraw from the banking sector. The country accepted the arrival of new banks that caused a significant increase in competition with a more diversified financial offer. Alongside the banking system, major efforts have been undertaken in the field of micro finance by mobilizing savings in rural and urban areas to serve as a tool for development of small and medium enterprises.

In addition, the reform of the public administration resulted in 2007 to the gradual decentralization of services and a more accessible and efficient justice. Reforms to transparency, reliability and efficiency in budget management continue to be implemented. A public finance building strategy has been defined, as well as an action plan to improve budget execution. The judiciary, especially the Supreme Court was restructured, an audit of the Department of Defense was completed and the national plan for good governance implemented.

The supply in energy was the subject of special attention. The country, in fact, depends for 70 percent on oil, 25 percent of water resources and about 5 percent of its electricity imports. Two programs were implemented to increase the electricity coverage: the electrification of small urban centers and the multifunctional platforms for poverty reduction in rural areas.

## 3. ECONOMIC GROWTH AND POPULATION WELL BEING

Through the social and economic development strategies implemented, one of the goals is to improve the living conditions of populations apprehended through their standard of living. There are two approaches for assessing the population standards of living. The utilitarian approach based on the assessment of individuals preferences. The second so-called non-utilitarian approach assesses well-being of individuals by focusing on the ability to feed, clothe etc. with poverty lines enabling the development of several indicators of poverty.

Since 1990, the fight against poverty has become one of central objective of development policies at the international level. Empirical works have been dominated by two complementary methods to analyze the links between growth, inequality and poverty: microeconomic method and econometric method. The microeconomic method studies the link between growth and inequality by analyzing their impacts on poverty dynamics at the micro level through the data on the living standards of households with the aim of studying the effectiveness of development strategies on the poverty rate. Recent years have seen a large literature on the phenomenon of poverty and its links to growth and inequality. A discussion of this literature is given by [14-17].

Datt and Ravallion [9,18]; Kakwani [9,19,20] proposed a conceptual diagram highlighting the interactions between poverty, economic growth and income redistribution. Referring to the conceptual schema and the work of Datt and Ravallion [9,18]; Kakwani [9,18], Bourguignon [4] has reported that growth alters the distribution of income, which itself partly determines the growth, structure and its impact on poverty. The problem is to measure the degree of independence or interaction between growth and income

distribution and to identify the transmission channels of different effects on poverty. Two questions emerge namely (i) how growth are reflected in the microeconomic level that is to say on the living standards of the population; (ii) how changes in poverty from one period to another are impacted by the effects of growth and distributional changes.

The growth theories establish a direct link between economic growth and living standards. Analyzing the relationship between income distribution and standards of living, Kuznets [21,2] indicated that the relationship between income per capita and inequality is inverted according U type. In other words, when income increase, inequality increase at first time, reaches a maximum value and then decreases after. If the empirical assessment indicates that growth is often accompanied by poverty reduction, the link between economic growth and growth in inequality is not systematic.

## 4. METHODOLOGY APPROACH

In this article, we used two methods to answer the two principal questions: (i) what is the structure and dynamics of the economy in Burkina Faso between 1990 and 2015; (ii) in what extent, the economic growth during these two decades has helped to improve the living conditions of the population. To answer the first question, we use descriptive analysis (univariate and bivariate analysis) based mainly on gross domestic product with a focus on different sectors (primary, secondary, tertiary). The results were then analyzed, converted into percentages and presented in charts and tables. The degree of structuring business was taken through the desegregation of formal and informal sectors. This analysis was completed by a dynamic analysis based on the evolution of GDP per capita.

To find in what extent, the economic growth during these two decades has helped to improve the living conditions of populations, we used the descriptive analysis by conducting an univariate and bivariate analysis based on the data four household surveys (EP, EBCVM, EICM, EMC)[1] realized by the National Institute of Statistic and

Demography. These analyses were completed by the statistical approach of Kakwani.

The statistical approach of Kakwani [19,20] consists to derive elasticity of poverty with respect to average income or expense and inequality. These elasticities are measured from the Lorenz curve and for estimating changes in poverty due to changes in income and those of the Gini index. The method is based on three main elements: the poverty line (z), the average income per capita or expense ($\mu$) and income inequality characterized by the Lorenz curve. Thus, Kakwani [19,20] shows that for a given poverty line, the variation of poverty is the combined result of two effects: a pure growth effect and an inequality effect. He suggests to consider decomposable poverty indices FGT [22] for α= 0, 1 and 2.

To determine the effect of growth, it is sufficient to express the elasticity associated with it. When the coefficient of aversion of poverty is not 0, income or expense elasticity ($\eta p_\alpha$) and Gini ($\varepsilon p_\alpha$) can be calculated directly using the following equations:

$$\eta p_\alpha = \frac{P_{\alpha-1} - P\alpha}{P\alpha} \; ;$$

Pour $\alpha = 1; 2$

$$\varepsilon p_\alpha = \eta p_\alpha + \frac{\alpha \mu P_{\alpha-1}}{z P_\alpha}$$

Where $P_0$ is the poverty rate; $P_1$ is the depth poverty index and; $P_2$ is the severity of poverty.

The central hypothesis of this method is that the variation of poverty is the sum of two opposite effects (negative effect of growth when inequalities remain unchanged and the positive effect inequality when the average income is invariant). When the coefficient is zero (α = 0), Kakwani uses empirical Lorenz curve and the econometric estimation of the parameters of the Lorenz curve. With the empirical approach, which is based on an observed sample to determine the coordinates of the Lorenz curve, Kakwani demonstrates that when the coefficient is zero,

$$\eta p_0 = \frac{z f(z)}{F(z)}$$

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[1] *EP=Enquête Prioritaire ; EBCVM=Enquête Burkinabé sur les Conditions de Vie des Ménages ; EICVM=Enquête Intégrale sur les Conditions de Vie des Ménages ; EMC= Enquête Multisectorielle Continue*

Where F(z) is the proportion of households situated under the poverty line. He shows that the Lorenz curve shifts depending on a parameter λ corresponding to the proportional change in the Gini index. If poverty is affected by the average income - or expenditure - and income inequality, it is possible to define a marginal rate of substitution between these two factors. This determines the percentage increase in average income or expense that poverty does not vary following 1% change in the Gini index. This rate is the ratio between the elasticity of inequality and that of income-expense, preceded by a negative sign.

After measurement and decomposition of poverty, percentage changes in this poverty will also be determined. To do this, we simply multiply the real GDP growth rate per capita by the elasticity of poverty compared to the average income-expenditure.

## 5. RESULTS

### 5.1 Structure and Dynamic of Economy

#### 5.1.1 Trend of gross domestic product

From 2000 to 2012, Gross Domestic Product of Burkina Faso increased regularly and linearly between 1.9 billion and 3.2 billion (Graphic 1). The annual average growth observed varies from 1.9% in 2000 to 8.7% in 2006 (Table 1). After 2006, 2009 was the year where we observed the lower growth. However, between 2000 and 2006, 2002 was the year of low growth. The same analysis on the Gross Domestic Product per capita leads to two main findings: (i) 2000 and 2009 have negative growth rate (-1.5% and -0.5% respectively); (ii) from 2001 to 2008, we observe that for all years, the annual growth rate for GDP is higher than annual growth for GDP per capita. Regarding the Graphic 1, we note that the curve of Gross Domestic Product is above the curve of Gross Domestic Product per capita. These results imply that since 2006, GDP has grown faster than GDP per capita, which also means that the effect of population growth induces a slower growth in GDP per capita while having a rapid growth of gross domestic product. This indicates the necessity to find a balance between demographic growth and economic growth.

#### 5.1.2 Distribution of gross domestic per sector

The main sector in terms of contribution to Gross Domestic Product between 2000 and 2012 is the tertiary sector regardless of the year period (Graphic 2). The contribution of this sector varies from 40.7 percent in 2003 to 46.4 percent in 2009. The primary sector comes in second position with the contribution hovering around 30 percent. The strong contribution (32.7 percent) is made in 2001 and the lowest (26.4 percent) in 2009. The taxes contribution hovered around 7 percent during the period.

This sectorial distribution seems to have an almost invariant structure during the last decade. It is clear that there is a low transfer between sectors. However, the economic literature indicates that labor mobility from less productive sectors to more productive is the engine of development and countries that have managed to extricate themselves from the throes of poverty are those that have managed to diversify their economies from the agricultural base. In addition, the speed with which this structural transformation takes place is the discriminating factor between economies that succeed and those that remain on the sidelines of progress.

### 5.2 Structure of the Different Economic Sectors

#### 5.2.1 Primary sector

Production of the primary sector has seen steady growth between 2000 and 2008. Indeed, it increased from XOF 593 billion in 2000 to XOF 902 billion in 2008 (Table 2). However, it declined in 2009 compared to the value recorded in 2008. This decline in primary production is mainly due to the decline in agricultural production. This slowdown recorded in 2009 at the level of agricultural production is partly explained by the poor distribution of rainfall that lowered cotton production of 720 675 tons in 2008 to 483,865 tons in 2009 [23,8] but also the fall in price from XOF 165 per kg to XOF 160 [13].

The analysis by the main components of the primary sector shows that this sector remains largely dominated by agriculture whose contribution in the sector has fluctuated between 50% and 59% during the period going from 2000 to 2012. It is followed by the livestock and forestry, fishing and hunting in that order. The contribution of forestry, fishing and hunting was nearly constant at around 11% over the period.

#### 5.2.2 Secondary sector

Two elements stand out in the secondary sector: manufacturing industries, textiles and the

building industry. Overall, production of the secondary sector has grown steadily from XOF 387 billion in 2000 to XOF 569 billion in 2012 (Table 2). The analysis by major components shows that the contribution of manufacturing industries other than textile industries in this sector varies between 35 percent and 58 percent; 2011 is the corresponding year of the lowest contribution. The building and public

works contribution is between 27 percent and 31 percent.

### 5.2.3 Tertiary sector

In the tertiary sector, production increased from XOF 797 billion in 2000 to XOF 1,439 billion in 2009. It is dominated by public administration

**Table 1. Rate (in percentage) of gross domestic product and gross domestic product per capita from 1990 to 2012**

| Year | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---|---|---|---|---|---|---|---|---|---|---|
| Growth rate of GDP | - | 4,1 | 0,6 | -0,2 | 30,4 | 12,7 | 11,3 | 7,6 | 15,5 | 0,0 |
| Growth rate GDP per capita | - | - | - | - | - | - | - | 6,0 | 12,1 | -2,9 |
| **Year** | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** |
| Growth rate of GDP | 1,9 | 6,6 | 4,4 | 7,8 | 4,5 | 8,7 | 6,3 | 4,1 | 5,8 | 2,9 |
| Growth rate of GDP per capita | -1,2 | 3,4 | 1,2 | 4,5 | 1,3 | 5,3 | 1,4 | 2,4 | 2,4 | -0,5 |
| **Year** | **2010** | **2011** | **2012** | - | - | - | - | - | - | - |
| Growth rate of GDP | 8,5 | 6,6 | 6,5 | - | - | - | - | - | - | - |
| Growth rate of GDP per capita | 5,0 | 3,2 | 3,1 | - | - | - | - | - | - | - |

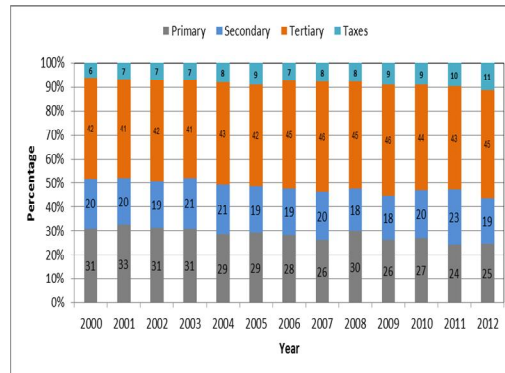*Data Source: Author estimations based on INSD statistical yearbook (2000, 2013)*
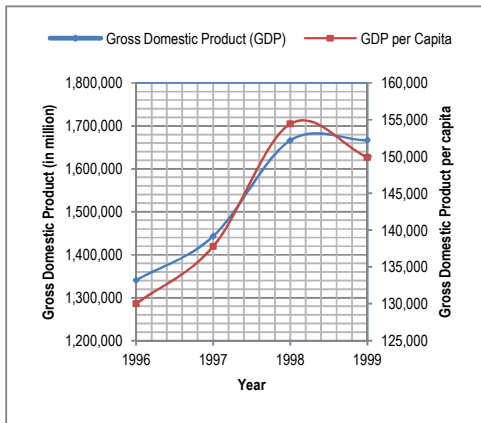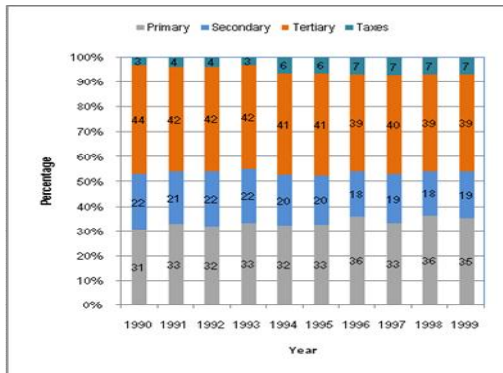


*Data Source:  INSD, statistical Yearbook (2000)*
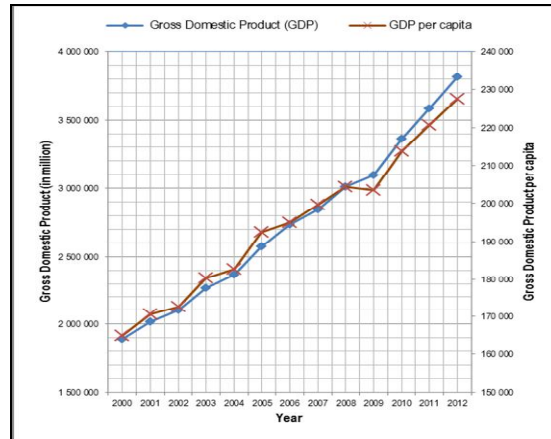


*Data Source:  INSD, statistical Yearbook (2013)*

**Graphic 1. Evolution of gross domestic product in volume at constant price from 1990 to 2012**





**Graphic 2. Distribution of gross domestic product per sector from 1990 to 2012**
*Data Source:  Author estimations based on INSD statistical Yearbook (2000, 2013)*

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with a contribution varying between 40 percent and 47percent (Table 2). The contribution of trade in this sector has remained fairly constant at around 23% from 2000 to 2007. It increased to 26 percent in 2008 and 28.5 percent in 2009 and decreased to 23 percent in 2012.

## 5.3 Degree of Formalization of the Economy of Burkina Faso

Informal economy grows where there are unemployment, underemployment, the poverty, gender inequality and casualization of labor [24]. It plays an important role in such conditions, especially in terms of income generation, because it is relatively accessible, even without much education or qualifications or large technical or financial means. However, in most case, to be in the informal economy is not the choice but the absolute necessity to have access to income-generating activities.

The Graphic 3 indicates in Burkina Faso the importance of the informal economy. Indeed, we observe that substantially over half the period 2000 to 2012, the formal economy occupied more than 50 percent, the other years are experiencing a dominance of the informal sector. However, it is important to note that it is not easy to determine the weight of the informal economy or to follow the evolution of employment in the informal sector.
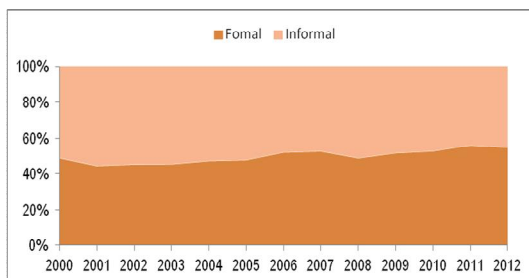


**Graphic 3. Degree of formalization of the economy from 1990 to 2012**
*Data Source: Author estimations based on INSD statistical yearbook (2006, 2013)*

## 5.4 Link with the Living Conditions of Populations

The objective of this section is to establish the link between economic growth from 1990 to 2015 and the living conditions of populations. It is to analyze the data available in order to know how this growth has influenced the conditions of population's lives.

### 5.4.1 Poverty rate

Despite the implementation of policies and programs to improve the living conditions of populations since 1990, the level of poverty has not significantly declined. It even increased from 44.5 percent [25] in 1994 to 48.6 percent [26] in 2003 (Graphic 4) due in part to the effects of currency devaluation. However, since 2003, Burkina Faso recorded a weakly significant decrease in the rate of poverty to reach 46.7 percent [11] in 2009. As shown in Table 1, in the same period there has been fairly steady economic growth with a mean growth rate of 4 percent from 1990 to 1999 and 5 percent between 2000 and 2009.The same finding is also observed at the level of GDP per capita. This growth seems not have benefited to the population whose living conditions have deteriorated between 1990 and 2003 and remained almost invariant between 2003 and 2009. After 2010, poverty rose sharply to 40% in 2014. This significant decrease in poverty could be explained in part by implementation of Accelerated Growth Strategy and Sustainable Development (2011-2015).

### 5.4.2 Depth of poverty

The depth poverty index measures the percentage of the poverty line in terms of transfer required to bring the average annual income of the poor to the poverty line. This is the financial effort needed to bring out of poverty a poor person. In 1994, it was enough to transfer him on average 13.9 percent (Graphic 5) of the value of the poverty line corresponding to XOF 5,713. This proportion increased to 16.9 percent in 2003 because of the consequences of the devaluation and recurring climatic hazards. But, since 2003, there has been a downward trend in the index of poverty gap from 16.9 percent to 15.1 percent in 2009 and 9.7 percent in 2014. Thus, in 2009, we need XOF 19,687 to take out a poor from its status of poverty against XOF 13,972 in 2003 and XOF 9,959 in 1998. In 2014, to take out a poor from its status of poverty, we needed XOF 14,892. In fact, the living conditions of the populations do not seem to improve significantly during these periods.

### 5.4.3 Percentage of poorest quintile in national consumption

The analysis of the evolution of the percentage of the poorest quintile in national consumption shows if over time the distribution of consumption expenditures is in favor or against of the poorest

in the population. In 1994, the percentage of the poorest quintile in national consumption persons was 8.8 percent (Graphic 6). This proportion has gradually declined from 8.4 percent in 2003 to 6.7 percent in 2009 and again increase to reach 8.4 percent in 2014. This result seems to highlight a deterioration of living conditions of the poorest populations compared to the richest. This situation can be explained by the fact that the poorer population is more vulnerable to the effects of the devaluation, recurrent climatic shocks, and food and energy crises.

### 5.4.4 Analysis of inequality

The severity of poverty that takes into account the inequalities between the poor has not really changed between 1990 and 2009. Indeed, we note that the sensitivity of poverty to economic growth associated with the severity of poverty has remained stable around -2.6 between 1994 and 1998. In 2003, it is estimated between -2.3

and -3.88 in 2014 (Table 4). During the period 1990-2009, the impact of an increase in the absolute value returned to the severity of poverty has thus not varied. This corroborates the findings of Deininger and Squire (1998) that it is often observed that growth increases inequality in poor countries while helping to reduce it in high-income countries. We also note that an important decrease of severity of poverty during the last five year form 6.7 percent to 3.3 percent.

It is important to note that the absolute value of elasticities of the severity of poverty compared to the average spending per head is higher than the unit. An increase of economic growth would reduce the severity of poverty. However, the flip side of this finding important to note is that if growth were negative, the severity of poverty would increase undeniably, especially if this decrease is not accompanied by a decrease in inequality able to offset the increase in poverty.
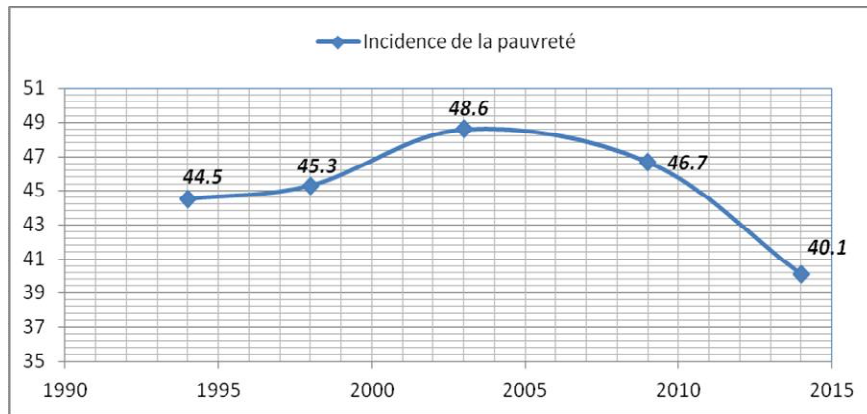


**Graphic 4. Evolution of poverty rate from 1990 to 2015**
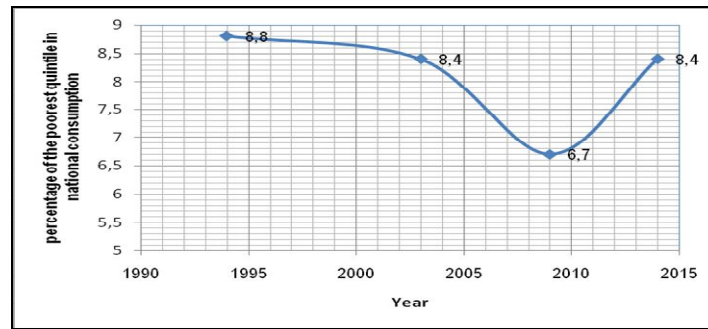*Data source: INSD (EPI 1994, EPII 1998, EBCVM 2003, EICM 2009, EMC, 2014)*
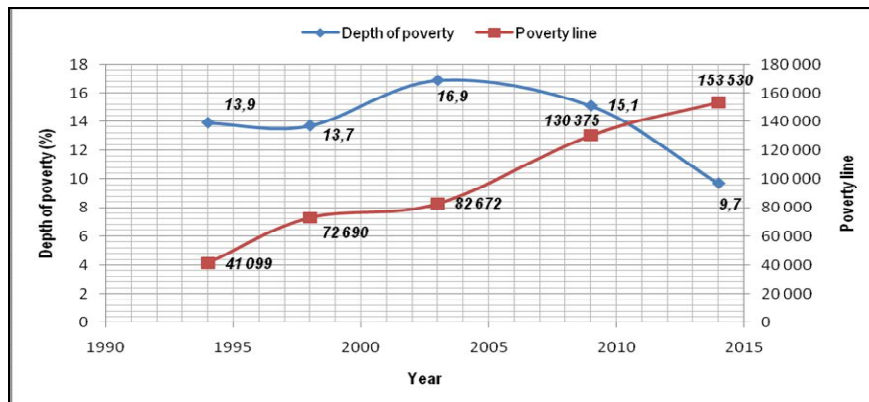


**Graphic 5. Evolution of depth of poverty from 1990 to 2015**
*Data source: INSD (EPI 1994, EPII 1998, EBCVM 2003, EICM 2009, EMC 2014)*

**Table 2. Distribution of gross domestic product and gross domestic product of different sectors by main component from 2000 to 2012**

| Components of sectors | Year | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **Primary** | | | | | | | | | | | | | |
| Agriculture | 53.2 | 59.4 | 59.0 | 57.4 | 52.9 | 54.7 | 55.4 | 49.9 | 56.6 | 51.7 | 55.0 | 52.5 | 54.7 |
| Livestock | 34.8 | 28.9 | 29.7 | 32.8 | 36.5 | 35.4 | 34.4 | 38.2 | 32.3 | 36.1 | 33.6 | 35.3 | 33.7 |
| Forestry-fishing -hunting | 12.0 | 11.7 | 11.3 | 9.8 | 10.6 | 9.9 | 10.3 | 11.9 | 11.1 | 12.3 | 11.5 | 12.2 | 11.6 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total GDP for primary sector | 593 | 659 | 661 | 706 | 681 | 751 | 777 | 748 | 902 | 818 | 593 | 659 | 661 |
| **Secondary** | | | | | | | | | | | | | |
| Extractives industries | 2.0 | 1.7 | 1.9 | 2.3 | 2.5 | 2.5 | 2.0 | 2,4 | 3,4 | 8,8 | 18.1 | 19.2 | 18.9 |
| Textile industries | 6.5 | 5.1 | 2.7 | 3.9 | 3.8 | 3.6 | 3.4 | 2.1 | 3.1 | 2.4 | 2.2 | 2.7 | 4.3 |
| Other Manufacturing | 53.2 | 51.3 | 55.2 | 58.4 | 58.5 | 58.4 | 56.5 | 58.1 | 51.7 | 47.1 | 37.7 | 35.4 | 41.4 |
| Energy (electricity, gas, water) | 6.7 | 7.1 | 6.8 | 7.8 | 8.0 | 7.8 | 7.6 | 7.2 | 10.7 | 10.7 | 7.2 | 8.9 | 2.0 |
| Buildings and Public Works | 31.5 | 34.8 | 33.3 | 27.5 | 27.3 | 27.7 | 30.5 | 30.3 | 31.1 | 31.0 | 34.9 | 33.8 | 33.4 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total GDP for secondary sector | 387 | 397 | 406 | 478 | 488 | 501 | 532 | 575 | 535 | 569 | 387 | 397 | 406 |
| **Tertiary** | | | | | | | | | | | | | |
| Transport network | 6.4 | 5.1 | 5.2 | 4.4 | 3.0 | 1.8 | 2.0 | 2.9 | 3.4 | 2.8 | 2.5 | 2.5 | 3.1 |
| Post and telecommunications | 3.8 | 3.7 | 5.0 | 5.2 | 7.8 | 8.6 | 8.3 | 9.5 | 9.5 | 8.2 | 11.8 | 12.9 | 14.5 |
| Trade | 23.6 | 22.2 | 22.3 | 23.6 | 24.0 | 24.7 | 23.4 | 24.3 | 26.0 | 28.5 | 26.3 | 24.0 | 23.6 |
| Banking and insurance | 3.1 | 3.7 | 4.5 | 4.3 | 4.0 | 5.2 | 5.0 | 4.8 | 5.0 | 4.5 | 4.7 | 5.6 | 5.5 |
| Other market services | 15.2 | 13.7 | 12.9 | 14.1 | 14.2 | 13.5 | 15.2 | 13.7 | 12.5 | 14.3 | 14.0 | 13.8 | 15.5 |
| Government and NPIs | 43.1 | 47.3 | 46.5 | 44.6 | 43.3 | 43.5 | 44.0 | 43.0 | 42.1 | 39.8 | 38.4 | 39.6 | 37.6 |
| Non-market services | 7.0 | 6.9 | 6.4 | 6.5 | 6.1 | 5.9 | 5.3 | 5.1 | 5.2 | 5.0 | 5.1 | 5.0 | 4.6 |
| FISIM | -2.2 | -2.6 | -2.8 | -2.7 | -2.5 | -3.2 | -3.2 | -3.3 | -3.6 | -3.2 | -2.8 | -3.4 | -4.5 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total GDP for tertiary sector | 797 | 827 | 889 | 923 | 1 012 | 1 092 | 1 226 | 1 306 | 1 344 | 1 439 | 797 | 827 | 889 |

*Data source: Author estimations based on INSD statistical yearbook (2000, 2013)*

**Graphic 6. Evolution of the percentage of the poorest quintile in national consumption**
*Data source: INSD (EPI 1994, EBCVM 2003, EICM 2009, EMC 2014)*

**Table 3. Distribution of gross domestic product and gross domestic product of different sectors by main component from 1990 to 1999**

| Component of sectors | Year | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
| **Primary** | | | | | | | | | | |
| Agriculture | 57.2 | 59.5 | 56.5 | 57.2 | 54.0 | 52.1 | 57.7 | 53.9 | 58.8 | 55.5 |
| Livestock | 26.0 | 24.4 | 25.9 | 25.5 | 30.8 | 33.2 | 29.4 | 32.2 | 28.9 | 31.6 |
| Forestry-fishing -hunting | 16.8 | 16.0 | 17.7 | 17.2 | 15.2 | 14.7 | 12.9 | 13.9 | 12.4 | 12.9 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total GDP for primary sector | 241 | 269 | 264 | 273 | 347 | 395 | 481 | 482 | 605 | 587 |
| **Secondary** | | | | | | | | | | |
| Extractives industries | 4.5 | 4.3 | 3.8 | 3.4 | 4.0 | 3.6 | 3.7 | 3.7 | 2.5 | 2.5 |
| Food, beverages and tobacco | 39.8 | 36.2 | 39.8 | 41.8 | 36.3 | 35.9 | 38.0 | 36.0 | 37.5 | 40.3 |
| Textile industries | 15.5 | 15.6 | 14.4 | 12.5 | 14.8 | 19.4 | 16.7 | 19.5 | 20.7 | 14.8 |
| Papermaking | 0.8 | 0.9 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Chemical industry | 3.4 | 3.9 | 3.6 | 2.3 | 1.9 | 2.2 | 3.4 | 3.5 | 5.0 | 3.0 |
| Manufacture of non-metallic mineral products | 2.2 | 2.3 | 2.2 | 2.3 | 1.0 | 0.9 | 1.8 | 2.2 | 1.6 | 1.1 |
| Articles of wood and metal | 7.0 | 6.6 | 6.1 | 6.2 | 4.1 | 4.7 | 5.2 | 5.0 | 5.5 | 6.2 |
| Energy (Electricity, gas, water) | 4.1 | 4.2 | 4.9 | 5.6 | 7.1 | 7.0 | 6.5 | 6.0 | 6.4 | 7.8 |
| Buildings and public works | 22.6 | 26.1 | 24.6 | 25.2 | 30.1 | 25.6 | 24.0 | 23.4 | 20.2 | 23.6 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total GDP for secondary sector | 173 | 171 | 181 | 178 | 215 | 237 | 245 | 281 | 295 | 313 |
| **Tertiary** | | | | | | | | | | |
| Trade | 34.5 | 33.0 | 33.6 | 32.3 | 34.4 | 35.0 | 36.3 | 37.2 | 38.4 | 35.3 |
| Hotels, bars, restaurants | 3.7 | 3.9 | 3.7 | 3.9 | 3.5 | 5.1 | 3.3 | 3.8 | 5.7 | 6.7 |
| Transport, storage and communication | 9.9 | 9.4 | 9.4 | 9.2 | 9.5 | 8.9 | 10.1 | 10.8 | 10.2 | 8.8 |
| Financial Institutions | 3.4 | 3.2 | 3.4 | 3.3 | 3.9 | 4.3 | 3.7 | 3.8 | 3.3 | 3.8 |
| Insurance | 0.2 | 0.2 | 0.3 | 0.3 | 0.0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 |
| Market services | 21.8 | 23.2 | 23.7 | 24.3 | 21.0 | 19.4 | 18.6 | 17.9 | 17.4 | 17.5 |
| Non-market services | 26.5 | 27.2 | 25.9 | 26.7 | 27.6 | 27.1 | 27.6 | 26.2 | 24.7 | 27.6 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Total GDP for tertiary sector | 345 | 345 | 347 | 345 | 440 | 499 | 524 | 576 | 654 | 654 |

*Data Source: Author estimations based on INSD statistical Yearbook (2000, 2013)*

**Table 4. Severity (in percentage) of poverty and FGT (2) from 1990 to 2015**

| Année | P2 | FGT (2) |
|---|---|---|
| 1994 | 6 | -2,63 |
| 1998 | 5,9 | -2,64 |
| 2003 | 7,8 | -2,33 |
| 2009 | 6,7 | -2,51 |
| 2014 | 3,3 | -3,88 |

*Data source: Author estimations*

Under these conditions, the implementation of economic policies and socio-economic programs that are likely to promote pro-poor economic growth would be more effective than a high growth policy if we want to improve the living conditions of the most disadvantaged.

## 6. CONCLUSION

This study showed that since 1990, efforts have been made by Burkina Faso in terms of planning and political reforms. These measures have helped to record significant growth rates but which nevertheless evolve irregularly. Between 2000 and 2009, the recorded average growth was around 5 percent against an expected target of 7 percent.

Concerning the composition of the main sectors, Burkina Faso's economy remains dominated by the tertiary sector. Its contribution to the economy in the period 2000-2012 varied between 40 and 46 percent. It is still a traditional economy characterized by a subsistence economy and a significant weight of agriculture. Though difficulties still exist at the measure of the formalization of the economy, we note that overall, the informal sector contributes over 44 percent to GDP.

The significant growth that the country has known since 1990 seems not to have significantly improved the living conditions of the vast majority of the population in the light of developments in the incidence of poverty. The incidence of poverty increased from 44.5 percent in 1994 to 48.6 percent in 2003, back to 46.7 percent in 2009 and 40 percent in 2014. We also note that the sensitivity of poverty to economic growth associated with the severity of poverty has remained stable. Despite the recent decline, the country has not yet managed to reach level observed in 1994.

In the light of these findings, the implementation of economic policies and socio-economic programs that are likely to promote pro-poor economic growth would be more effective than a high growth policy if we want to improve the living conditions of the most disadvantaged. Furthermore, as the country has undertaken to have advantage of the demographic dividend, it is important to develop appropriate economic policies to achieve structural transformation of our economy.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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