American Journal of Business and Society
Vol. 2, No. 1, 2016, pp. 20-28
http://www.aiscience.org/journal/ajbs

Presidential Project and Development in Congo

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Abstract

The aim of this article is to study the impact of the new Congo Republic President program on development in an endogenous growth model with human capital accumulation as an engine of growth and development. The aim of the policy is to achieve development and unemployment absence in the country. Whereas macroeconomic models don't allow unemployment existence, to introduce it inside those structure, we use Lewis (1954) excess unemployed labour transfer from traditional to modern sector as a key for development coupled to human capital accumulation which is costly and deserves parental investment, thus mainly hold by children whom parents have invested on it. If the government policy is applied under corruption absence, then development may occur, otherwise depending on its degree, the economic path may remain kept in a poverty trap with negative growth rate or moves quite slowly through the time. Physical capital investment also plays a great role in development take-off since coupled to productivity increase higher quality goods may be produced which then make growth accelerates in Congo.

Keywords

Human Capital, Development, Growth, Excess Labour Demand, Corruption Institutions

Received: May 5, 2016 / Accepted: May 16, 2016 / Published online: October 19, 2016

1. Introduction

The aim of this article is to build a framework able to make the country reach development take-off in order to exhibit high growth rates for the excess labour supply to be absorbed by the system which yields to the end of poverty caused by the relative low labour productivity levels in the country, thus cause under development of productive capacities as well as development retard in the little country.

The article is motivated by the Congo Republic President development program focused on human capital and productivity increase. We study the impact of the public program of development in order to understand in how far the economic development policy proposed is able to ensure the economy long run growth existence and stability over time.

Congo Brazzaville still in transition toward market based economy. Thus the research question asked by this article still the one evocated by Robert Lucas in its 1988 article: *is there some actions the government could take that would lead the Economy to grow like New Industrialized Countries? If so what are exactly those actions? If not, what is the nature of Congo that makes it so? The consequences for human welfare involved in questions like theses are fundamental*[1].

How to get developed remains a central issue in economic development since the beginning of the theory back to Rosenstein-Rodan [1][2] who was the first to raise those kind

1 This question is first addressed by Robert Lucas, Jr in his article of 1988 untitled «On the Mechanics od Economic Development" and became the basis of growth when aim is to show-off its crucial role in economy
2 Rosenstein-Rodan (1943) is modelled by Murphy-Shleifer-Vishny (1989) and previously introduced in new economic development theory by Waters (1978), Chen (1994), and Ahn (1990). The rest of the ideas provided by standard economic development theory and introduced in new development economics since the 1990s by Issa (2005) and Nissan Niroomand (2006) for example

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of question for the countries economically depressed[3]. The question raised a body of literature which aim is to propose policies able to lift a given country out of under development or the poverty trap specifically until the book of Hirschman [2] period during which, the theory remains famous and fall around the years 1970s because of the lack of method in social science [3]. Therefore, to give foundations to the set of ideas provided by the Development Economists Pioneers based on Keynes' economic policy thought, where the government action must guarantee optimality in economy rather than equilibrium because of individual rationality. That approach contradicts the one proposed by [4] the liberal economist Rostow [4] where development is a process with several steps [5] that a given country must cross to reach development and exhibit long run growth over time. Preliminary to his book, in 1958 at Cambridge University, he conducted a seminal paper where he was wondering if the dependant countries once independent in 1960, will be able to stimulate growth like industrialized countries. Even if the world assist to the development of some countries both in Asia and in Latin America around the beginning of the 21th century, it still true that some other still under developed specifically in Africa, so that, development question still widely open.

This article aim is to analyze the proposition presented by the President of Congo for his election in April 2016 that he won at the first step of the process. The Congo Republic President, Denis Sassou N'Guesso is voted once again for 5 years from 2016 to 2021 and his main program is focused on development, so that, propositions able to boost the economy toward development take-off and for long run economic growth to settle are welcome. The determination of the existence and the stability of the long run growth once development is reached and poverty eradicated are central for the public policy conducted in this new country's direction period. In order to propose a solution to development, the article adopts the concept of the absorption of the excess labour supply in the country where human capital investment is central for the project to be successful since it yields income increase through productivity increase. Human capital accumulation referred is the one acquired through learning by doing while production is holding [5] in order to increase skills as well as productivity. But there also exist human capital acquire through the education system [6], [7], [8], [9] by the agents whom parents are skilled, thus able to face human capital accumulation cost for their off-springs [10], the target to reach is to be able to generate higher quality goods in the production sector when engineer or innovations in the research sector when a professor [11], [12]

The purpose of the economic policy proposed is to achieve industrialization like proposed the development economists pioneers in the least developed countries since 1950 and it holding condition is to ensure an environment where corruption in Institutions is absent for it to lift the economic path out of poverty and reach development take-off. The model proposed aim is to allow the country emerge once the market based economy fully settled, which is actually the goal almost shared by most of the countries in the world since the end of Communism in 1989 with the Berlin wall fall. Indeed, the expectation is to join the convergence club where we can find the New Developed Countries appeared around the years 2000s and exhibit today, the highest growth rate in the world i.e Singapoor, Taiwan, South Korea, Hong Kong called the four Asian Dragons. Moreover, the list enlarges with some other countries in Latin America like Venezuela and Brazil for example and other past Communism countries like Russia which performance shown in the first decade of the 2000s was such great so that it joined the closed G8 cycle of high industrialized countries. Instead, there are also countries which keep regressing in economic performance like those located in the south of Europe like France, Spain, Portugal, Greece,…

But back to the beginning i.e in the 17th century, all the countries were under developed [13], and development began first in England in the 18th century and then spread all over the Europe with some problems in its continuity due to the frequency of the world wars. Then development settled again after the post war 2 and growth accelerates until the two oil shocks of 1973 and 1979 which began to end the Europe *Golden growth age*. So that, with the end of Communism, a political thought directing the economy on the basis of Karl Marx works, introduced in Congo before, cease too and change the world Country's orientation which became "Congo Republic" rather than "Popular Republic of Congo", thus like other countries, joins the Western Economic thought based on the Neoclassic Model which began with Smith [14][6]

3 Originally, this article focused on European Countries depressed economically such as in Eastern but turns out to form a body of study of development economies over time since the study is considered to belong to the Pioneer works in development Economics

4 Those authors dispute over the nature of the policies that might be required to break a country out of a low-level trap. Rosenstein-Rodan and others appeared to imply that a coordinated, broadly based investment program -- the Big Push -- would be required. Hirschman disagreed, arguing that a policy of promoting a few key sectors with strong linkages, then moving on to other sectors to correct the disequilibrium generated by these investments, and so on, was actually the right approach. Arthur Lewis's famous "Economic development with unlimited supplies of labor" emphasized dualism among modern and traditional sectors of good production which causes under development, thus the absorption of low skilled workers from traditional sector into modern sector was the right approach leading to development. Fleming (1954), argued that owing to the role of intermediate goods in production was the way to develop faster a given country.

5 Rostow (1960) defined 5 process that a given country must cross to exhibit development first and long run growth after which are: the traditional society which is the initial period, preliminary conditions of change of the economy, the take-off, the walk toward the Maturity and finally mass consumption

6 This author is the first to highlight scale economies and individual rationality through the concept of "invisible hand" which stipulated that looking for his own

to look for the way to integrate Market based economy or liberalism in order to find the appropriate framework for the country's development take-off to occur. That's what we call economic globalization since Western Economic Thought won against Communism and tends to establish a kind of universal model of the world economy.

Development model proposed is conducted using an endogenous growth model where development is viewed as a locus on the space where unemployment is absent and the agents' income increased through their labour productivity increase. Since all the agents are unable to invest in human capital which is provided by parental assets, there exist unskilled labour as well as agents almost without job, thus the economy remains on the *knife edge* [15], [16] so that we want it to reach the *long run growth* [17]. Recalling that the structure of the model used is based on the Solow model which doesn't allow unemployment, we introduce Lewis [18] concept of unemployment since modern and traditional sectors don't allow to win the same wage rate income, thus some unemployment is hidden in the traditional sector or land. So that development yields from the excess unemployed labour transfer from traditional to modern sector of production which deserve agents to be trained for the modern sector to be able to absorb if possible all the excess unemployed labour for poverty caused by low income provided by the traditional sector to be eradicated. We find that, Corruption in Institutions relied to funds deserve to economic policy, is the main thing which can create an eviction of the results expected. Since corruption is absent, then the economy follows its development path. Otherwise, the result may leave the economy inside the poverty trap with human capital lack and development retard. Finally, if the degree of corruption is not too high, then development will take a certain time to appear and growth is low rather than being negative.

The scientific contribution of the analysis holds on the following aspects, *fist* it is a theory of economic development based on growth theory concepts that test a given political proposition on development occurrence, *second,* the theory is entirely applied for a specific country since its economic environment is fully captured in a formal model which is mostly done in empirical models; *Third,* the introduction of unemployment[7] in a macroeconomic model expressed by excess labour transfer from the land to the modern or the industrial sector of production. Indeed, this article rise the standard development economic theory pioneer in this new approach of development based on theoretical models after its crisis of development theory pioneer due to the lack of methods in social science around the years 1970s where those kind of articles became unpublished [19].

French Colonial action began in 1875, date of the first expedition conducted by Savorgnan de Brazza originally from Italy in that territory i.e the actual Congo Republic. From 1875 to 1878, Savorgnan de Brazza went up to l'Ogooué and to la Mpassa. In 1880, during a new travel, he met King Makoko from Mbé and Iloo, a chief in charge of an authority on the lands around Alima and Congo River. Savorgnan de Brazza obtained through a negotiation, the authorization to establish a French station in a place called today, Brazzaville. In October 1880, the first French Institute is created close to Congo River. Through the time, there is a kind of spread of the Colonial settlement, the French sent Negotiators to obtain authorizations of the same kind as those obtained earlier. The first religious went there in 1883 to Linzolo (located at 30 kilometers far away from Brazzaville) and to Loango (located at the North of the actual Pointe Noire). In 1886 is created the Catholic high status personalities directed by Mgr Carrie. In 1903, the French Congo became the territory of the middle Congo. In 1910, the middle Congo is introduced inside the general government of the French Equatorial Africa with Oubangui-Chari, the actual Center of Africa and Tchad, Brazzaville remaining the chief place. Since those years, the middle Congo territory is left to some firms which use raw materials specifically, rubber, wood and other tropical products. The compulsory job and the bad treatments imposed to the inhabitants of the region, raise questions in Paris about the French actions in the territory. A verification Commission went to work there in order to understand what matter, but the results found have had never been published. The firms accuse to be responsible of those bad treatments were: SCKN[8], CCSO[9], CFAO, SHO,… Always in 1910, Pointe-Noire became the capital of the middle Congo but Brazzaville still the capital of the French Equatotial Africa. In 1911, a first great mission from Gabon conducted by the military Officer Audoin, launch the construction of the rail way in Center of Africa from Brazzaville to Libreville which began in 1921 under the direction of the governor Victor Augagneur. The World Health Organization office settled in Brazzaville, in 1952. In November 1958, after the law of Gaston Defferre of 1956, the middle Congo territory became autonomous but not independent from France. Congo became independent only on august 15 of the year 1960. Then, the high level personality of the Catholic Church, Abbe Fulbert Youlou, after have been a Price Minister, became the President of Congo until the year 1963. But during the events

utility yield to the aggregate satisfaction of the society

7 This component can't hold in an endogenous growth model based on Solow (1956) structure where labor supply is assumed to be fully employed, thus don't allow unemployment existence which is left to the microeconomic models of labor market

8 Dealer Society of Kouilou Niari

9 Dealer Sangha-Oubangui Company

of august 13, 14 and 15 of the same year, called “the 3 glorious days”, the President had to leave his position after a great pressure from stockholders. From 1963 to 1968, Alphone Massamba Débat became the new President trained in Western countries like the most part of his government. The new President became close with China in the concern of International Politics and joins the Communism team. The economic policy focuses on investment goods like housing as well as the middle societies. The private sector remains very strong supported by foreign firms like CPC[10], ELF Congo for oil and others firms which work with wood was at that time, the main fund provider in the Country. On august 2, 1968 after the rebellion of a part of the army, Massamba-Débat went to hidden himself to Boko (a region of the Pool where he was originally from), his native village and gave his end of services letter on September 4, 1968. The military crisis was caused by the arrest of the Captain Marien N’Gouabi, a Congo officer known from his socialism convictions. Set free by some “parachutists”, on august 2, he created the CNR[11] that he took the head. Captain Alfred Raoul, a close friend of Marien N’Gouabi, became the Chief of the Nation until the CNR introduced himself as to be the highest government office on December 31 of 1968. Until that date, Marien N’Gouabi who became Commandant by himself just before, became the Chief of the Nation i.e the President of Congo and promotes the fact that the country is Socialism. Indeed, Congo gets inside its second republic, now it belongs to the population also called “popular”. The administration or the government Institutions settled in Brazzaville, the main positions were hold by the members of Congo Workers political organization called “PCT”[12] and still strong until today. Congo Republic became “Popular Republic of Congo”. There is political non stability inside the country which faces several pushes under the direction of the Officer Kinganga, all the strategic buildings are kept such as those which diffuse news on march 23 in 1970 before being killed on February 22 of 1972. The Officer Ange Diawara tried to take the direction of Brazzaville before going to hidden himself in the Pool where he resists until the middle of the year 1973, many Officers were under arrest accuse to be in complicity with those events even the past Prime Minister, Pascal Lissouba arrested several times specifically during political and social disorders hold on 1976 in Brazzaville and the murder of Marien N’Gouabi in 1977. During that period, Congo remains depending from abroad specifically for both eating and manufactured goods, its economy still based on exportations of raw materials (wood, oil, iron, potash,…). Oil resources remain few and the country still far away from reaching its neighbouring country’s economic prosperity i.e Gabon. On March 18, 1977, President Marien N’Gouabi is murdered in his residency. Several days after, the same thing was done to Cardinal Emile Biayenda, Archibishop of Brazzaville on March 22. The past president Alphone Massamba Débat was murdered too. On April, 5, 1977, Colonel Joachim Yhombi Opango became the President until February 1979. On February 5 1979, Colonel Denis Sassou N’Guesso took the head of the nation until august 1992. Tensions rise specifically with the adoption of the Structural Adjustment Policy proposed by the World Bank caused by national debt increase in 1985 and led the country to poverty increase. During Presidential elections in August, Pascal Lissouba and Bernard Kolelas cross the first step in contrast to Denis Sassou N’Guesso who came out in the third position then supported Lissouba for the last election step and he was elected with high records far away from the one done by Bernard Kolelas. On October 15, 1997 the civil war in Congo between Pascal Lissouba and Denis Sassou N’Guesso for the President position ends with the victory of Denis Sassou N’Guesso who adopted a new Constitution in 2002 where the Price Minster position was suppressed, so that the President power was increased. The President was settled for 7 years from 2002 to 2009, period of peace back in Congo even remained a fraction of non happiness people in the region of the Pool. The oil boom made the Country quite rich and reaches its highest budget around more than 1 billion of CFA francs. Several projects specifically in roads are conducted in cooperation with both Chinese and French Multinational Firms. Once again, the population put their expectation on the President Sassou N’Guesso for 5 years more i.e from 2016 to 2021, so that, we are interested in knowing in how far his program may yield development take-off and stimulate growth in Congo?

The literature of growth began with Harrod and Domar which aim was to establish the stability of the long run growth that they fail to obtain because of unemployment existence on the economic path, so that the one obtained was unstable and contradict the findings of Denison [20] which stipulates that, the long run growth is stable through the time after testing the Solow model who promotes long run growth existence since the production factors could be substitutable. But remained the question to know where growth came from i.e the sources of economic growth in the production measured by the GDP. Then the theory gets inside a kind of crisis since it was impossible to show them as well as to eradicate the convergence consequence caused by the decreasing marginal product of physical capital character adopted in the famous Solow model. Exogenous growth models were left in order to render growth endogenous to identify its sources. Then emerges endogenous growth

10 Potash Company of Congo
11 National Revolution Council
12 Working political Union of Congo

models[13] with Romer explanation [21] based on increasing returns concept in the long run growth context to show what was the explanation of the improvements of production i.e from technological change, added to human capital initiated by Becker [22] and Schultz [23] that Lucas introduced inside the Solow model, under development trap could now be explained by human capital investment absence [24]. Then technological change also came out to be an engine of growth explanation [25], [26] thus both human capital and technological change interaction are able to explain the rise of economic growth in a given country [27]. But still some countries remain economically depressed and highlight poverty, so that the paradox remains far away to be solved. Those countries preliminary goal is development rather than growth, therefore this article revisit the question of development on the basis of growth theory findings specifically through human capital since the aim of the paper is to test the Congo President Denis Sassou N'Guesso development propositions focused on human capital investment increase to understand in how far development may settle and accelerate growth in the country for poverty to cease. To conduct the study, we use Lewis concept of excess unemployed labour of the traditional sector since the growth theory doesn't allow unemployment as proved Solow for the long run growth path existence and stability in contrast to Keynes' growth concept where unemployment prevails and adopted by Harrod and Domar that fail to be proved empirically and highlight only unstable growth path over time. The evolution of the theory went in many others directions such that environment study [28], health [29], the brain drain theory [30],.. And all use mainly human capital to conduct the economic policies based on development which should be sustainable.

The article is organized as follow, section 2 setup the theoretical model, section 3 conducts a discussion of the results found and section 4 concludes on the study.

2. The Model

Consider a developing country where agents live for two periods, the young and the old age where he is in rest. Between the initial time of birth and t the agent acquires knowledge through the education sector depending on his parents' social status and not at all if it is too low to deserve funds for training. Therefore, the agents work between the period t and $t+1$ and gets in rest somewhere during $t+1$ evaluated at approximately 65 years old, then he dies at the end of the period.

The country is classified like a middle income country because it possesses sufficient funds provision due to the raw materials which possess the country, specifically oil and is endowed of a little population size. The country needs to get industrialized, thus promote development through education and learning by doing which holds during the production process is chosen as the way of human capital accumulation. At each period of time, a stock of N_t young agents get inside the system endowed of zero human capital but with low ability level, h_0 and the population size grows at the rate $n>0$ such that, $\frac{N_t - N_{t-1}}{N_t} = n$. The young agent whose parent have preliminary accumulated human capital, can get inside the education sector to become next period an engineer who work in the modern production sector to absorb and or to adapt new innovations or become professor to conduct R&D to generate new innovations in the education sector. The rest of the young agents i.e those whom parents have not accumulated human capital previously, work as unskilled labour and are divided in two kinds, some work in the traditional sector (agricultural sector), thus live in the countryside of the country and face unemployment since they don't hold a real job but work for and by themselves. So that, in the traditional sector, there exist a hidden unemployment, others unskilled labour work in the modern sector of production (manufacture or industry). Indeed, the fraction of young people whom parents do not possess human capital are mainly found in the traditional sector where income are low and work in an uncertain way, thus their income are not only low but also uncertain. Human capital stock is the sum of engineers and of professors, $H=E_t+P_t$ where per-capita human capital hold is, h_t and unskilled labour stock is the sum of the modern and the traditional sectors of workers, $U_t=U_t^T+U_t^M$

The production sector is divided in two parts which are the modern and the traditional sectors since the education sector is assumed to be exogenous in the model because the aim of the work done is mostly to show how learning by doing coupled to human capital hold can generate growth over time and lift the country out of poverty trap.

The Modern sector of production employs human capital,

13 Romer (1986) and Lucas (1988) are the pioneers of endogenous growth theory where the first growth models explain increasing returns and knowledge externalities for the second model through the neoclassical growth model of Solow (1956) extended to human capital initiated by Becker (1964) and Schultz (1961). Demography can be connected to endogenous growth models which deal with human capital to study development (Maksymenko and Rabbani, 2011; Issa, 2005; Dahan and Tsiddon, 1998). Growth models which deal with endogenous technological change and human capital accumulation on the basis of Schumpeter (1942), like Eicher (1996), are initiated by Aghion and Howitt (1992). Without the Schumpeterian creative destruction concept, the endogenous technological change growth line is initiated by Romer (1990). Endogenous technological change research line is not really followed by new development economics yet. The pioneer of new development economists like Oh (1976), Waters (1978) and Gray (1986) still to explain development with exogenous technological change. That is the effort made in this article to deal with the endogeneity character of knowledge which accelerates changes in technology in the process of economic development of the poor countries.

physical capital, K_t which doesn't depreciate and unskilled labour using the Cobb Douglas function such that

$$Y_t^M = A_t^M E_t^{\alpha} K_t^{\beta} \left(U_t^M\right)^{1-\alpha-\beta} \quad (1)$$

Where A_t^M is the productivity of the modern sector and Y_t^M is production stock

The traditional sector employs only unskilled labor and expressed such that

$$Y_t^T = \delta h_0 U_t^M \quad (2)$$

Rewriting equations (1) and (2) in intensive forms, it yield equations (3) and (4) such that

$$y_t^M = A_t^M h_t^{\alpha} k_t^{\beta} \quad (3)$$

Where $y_t^M = \frac{Y_t^M}{U_t^M}$ is per-capita production, $h_t = \frac{E_t}{U_t^M}$ is relative human capital level and $k_t = \frac{K_t}{U_t^M}$

$$y_t^T = \delta h_0 \quad (4)$$

Where $y_t^T = \frac{Y_t^T}{U_t^T}$

Maximization of the profits in the two sectors yield factor prices such that

$$w_t^E = \alpha A_t^M h_t^{\alpha-1} k_t^{\beta} \quad (5)$$

$$w_t^{U,M} = \left(1-\alpha-\beta\right) A_t^M h_t^{\alpha} k_t^{\beta} \quad (6)$$

The interest rate can be expressed such that

$$1 + r_t = \beta A_t^M h_t^{\alpha} k_t^{\beta-1} \quad (7)$$

$$w_t^{U,T} = \delta h_0 \quad (8)$$

The factor market equilibrium requires

$$w_t^E = w_t^P \quad (9)$$

Equation (9) means that the engineer working in the production and the professor working in the education sector win the same wage rate income, so that equilibrium can hold between the two sectors. Otherwise, the production may turns out to lack human capital able to lift the country's growth and development since high skilled labour able to adapt and absorb new innovations in production is almost absent.

The aim of the government is to make a transfer of excess unemployed labour from traditional to modern sector in order to make $w_t^{U,T}$ converge to $w_t^{U,M}$ through an appropriate economic development policy based on training [14] or productivity increase in order to eradicate poverty and inequality that we will present later on.

The law of motion of training while production is holding in order to reach the average human capital level required to join the modern sector is expressed such that

$$h_{t+1} - h_t = A_t^M k_t^{\mu} h_t \quad (10)$$

The preferences of the agents are the same and expressed such that

$$U = \ln\left(c_t^i\right) + \gamma \ln\left(d_{t+1}^i\right) \quad (11)$$

Where $i=E,U$

In the first period when young, the agent spend his wage rate income to the first period consumption, c_t^i, savings, s_t^i since human capital accumulation is provided by parents between 0 and t expressed by a bequest, θ^i. The government taxes human capital income at a rate τ^i to conduct human capital increase policy.

In the second period when old, the agent consumes his saving because he is in rest. Therefore, his budget constraint of each period can be written such that $w_t^i = c_t^i + s_t^i + \theta^i + \tau^i$ and $\left(1+r_t\right)s_t^i = d_{t+1}^i$, where $\theta^i = \tau^i = 0$ for $i=U$

Therefore, the intertemporal budget constraint of the agent can be written such that

$$w_t^i + \theta^i + \tau^i = c_t^i + \frac{d_{t+1}^i}{1+r_t} \quad (12)$$

The optimal program of the government consists on human capital increase as well as on corruption (highlights on discussion later on) absence and can be expressed such that

$$MaxU = \underset{c_t^i, d_{t+1}^i, h_t, k_t}{Max} \left[\ln\left(c_t^i\right) + \gamma \ln\left(d_{t+1}^i\right)\right]$$

Sc

$$w_t^i + \theta^i + \tau^i = c_t^i + \frac{d_{t+1}^i}{1+r_t}$$

$$h_{t+1} - h_t = A_t^M k_t^{\mu} h_t$$

To solve the optimal program, we need to write the Lagrangian in order to compute the solutions i.e

$$Л = \left[\ln\left(c_t^i\right) + \gamma \ln\left(d_{t+1}^i\right)\right]$$

14 This development policy was first proposed by Lewis (1954)

$$+\lambda_1[\, w_t^i + \theta^i + \tau^i - c_t^i - \frac{d_{t+1}^i}{1+r_t} \,] + \lambda_2[\, \Delta h_t - A_t^M k_t^\mu h_t \,] \quad (13)$$

The first order conditions yield the optimal values both of the consumptions of the periods and human capital evolution over time i.e

$$c_t^i = \frac{1}{1+\gamma}\left(w_t^i + \theta^i + \tau^i\right) \quad (14)$$

$$\frac{d_{t+1}^i}{1+r_t} = \frac{\gamma}{1+\gamma}\left(w_t^i + \theta^i + \tau^i\right) \quad (15)$$

$$\Delta h_t = A_t^M \mu^\mu h_t \quad (16)$$

Proposition 1: *the development policy without corruption is summarized by the endogenous preferences and human capital growth rate expressed such that following*

$$U = \left(w_t^i + \theta^i + \tau^i\right)^{1+\gamma} \Phi \quad (17)$$

$$g = A_t^M \mu^\mu \quad (18)$$

Where $\Phi = \left(\frac{1}{1+\gamma}\right)\left[\frac{(1+r_t)\gamma}{1+\gamma}\right]^\gamma$ *and* $g = h_{t+1} - h_t / h_t$ $= \frac{N_t - N_{t-1}}{N_t}$

We can see that, the utility function of the agent depends positively on funds provided by the government for human capital increase in order to facilitate the transfer of excess labour unemployed from the traditional to the modern sector. This utility also increases with parental investment in human capital. Therefore, the growth rate which highlights development, depends on the productivity of the modern sector as well as on the investment on physical capital or new technology (innovations) needed for production. Equation (18) assumes that the growth rate exist and it is stable over time since it is equal to the population size growth rate since even for a small population, increasing returns and scale economies which are fundamental in an industrialized country [31]

3. Discussion of the Result

Corruption[15] is characterized by the eviction of funds deserve to economic policy for development achievement, τ^i inside the range [0, 1], indeed

If $\tau^i = 0$, then all the funds deserved to the development policy has disappeared, the economy can't developed since it carries excess labour demand and poverty which yield $\theta^i = 0$ and thus generate low utility. Therefore, there exist corrupted agents inside the Public Institutions who spend money for other needs than the project promoted by public economic policy. Otherwise

If $0 < \tau^i < 1$ then, the economy may partially achieve its goal since only a little part of the population in need could beneficiate from the government aid, thus poverty still in the system which can be viewed through the utility located under its optimality. Finally

If $\tau^i = 1$, all the funds are allocated to the economic policy, then excess labour transfer can be done and utility increases greatly. Development is achieved according to the work of Lewis which could allow us introduce unemployment inside the growth model where it is absent due to its structure and aim which are to look for the long run growth. Indeed, since human capital is also increased, as an engine of economic growth proved by the literature viewed above, development may came out. But human capital and productivity increase must be supplement to physical capital investment (innovations) too for training while production is holding to settle specifically in new technology more efficient in good production for the country to cross the natural resources supply in international exchange trade for manufacture goods and win markets shares in order to get more efficient in economy. In regard to the definition, corruption is a behaviour which deviates from formal duties of public role because of private regarding (personal, close family, private clique) pecuniary status gains; or violates rules against the exercise of certain types of private regarding influence. The World Bank takes minimal working definition which is the abuse of public office for private gains and can be evaluated to 55% in Latin America against 45-85% in Easter Asia and 80% in Africa [32], [33]

4. Conclusion

The aim of the analysis was to study the impact of the development policy proposed by the President of Congo (Brazzaville) on economic development. We follow the instruments promote such that human capital and productivity increase for poverty eradication through unemployment cease. Indeed, we use Lewis development policy to prove how, that goal can be achieved i.e transfer of

15 The literature of corruption can be summarized in three approaches. *The first research line* addresses why policymakers, business leaders, and private citizens should concern themselves with the existence and elimination of corruption (Qian, Rong, 2012). This research program focuses on the effect of policies and reforms on growth and macroeconomic stability and concludes that differences across countries in the quality of their institutions explain growth heterogeneity. *The second research line* addresses how and when political, social, and economic forces contribute in counter corruption drives, cost-benefit analysis on the part of a country's leaders in order to determinate existence or lack of an official policy (Banuri and Eickel, 2012). *The third approach* focuses on what types of policies effectively counter corruption and highlight effective anticorruption instruments.

excess labour unemployed can hold since the required productivity is achieved. Development may settle if Corruption in Institution is reduced as we've shown that if all the funds deserve to training while production is holding is fully used for that purpose, the transfer can be done and since goods quality are increased because of productivity increase and investment in more efficient materials done, the economy may be able to produce higher quality goods that can be sold in international market, then win markets shares. Poverty will decrease since the modern sector wage rate income is higher than the one of the traditional sector and face unemployment or low income. Growth may also accelerates if corruption is absent in the administration of the Institutions. Still the question of development began in the years 1950 for the countries under Western countries power remain a hard task because there doesn't exist appropriate model able to do it. Consequently, discussions on development occurrence still widely open.

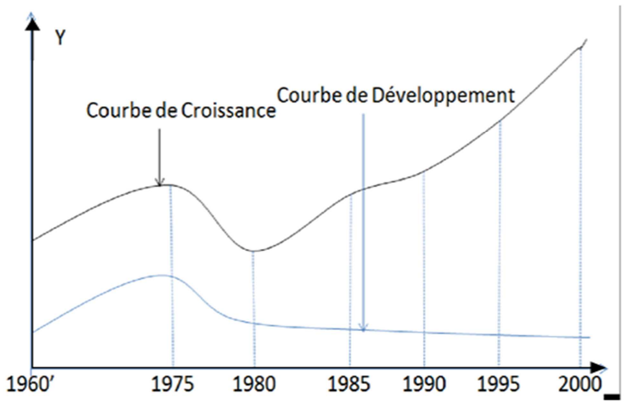

Figure 1. Highlight the history of growth in the concern of developed countries and development for the developing countries since the years 1960s.

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