

Strike, Political Protest and Economic Development: Evidence from Cameroon

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Cameroon is in dire-need of economic growth and development. These cannot be achieved under instability and rancour especially the cases of strike activity and political protest. Therefore, this study is designed to qualitatively and quantitatively examine the determinants of strikes in Cameroon within the period of 16 years starting from 1990 to 2005. This period is highly associated with work stoppages resulting to numerous man-days lost. Operation ghost towns of 1992/1993, which is the giant strike or political protest that has ever taken place in Cameroon, resulted to over CFA 70 billion unearned revenue. In this work, the frequency of strikes, the causes of strikes, the different forms of strike activity and the various measures taken by the new deal regime to deal with the strikes and any activity resulting to work stoppages are discussed. An ordinary least squares co-integration error correction methodology, which involved two equations are conducted. The results confirm negative significant effects of strike on productivity among corruption, unfair government, oppressive tendency and price instability with unemployment not left out. We therefore, recommend the combination of good governance, price stability with low inflation, harmonisation of real wages and salaries, job creation, elimination of oppressive tendency and the creation of National Industrial and Social/Political Arbitration Panels (NIAP) to handle industrial Social/Political disputes in Cameroon.

Field of research: Economics

1. Introduction

Development, which is observed to be a multi-dimensional or multifaceted concept, does not limit itself to economic growth but it also involves structural, institutional, cultural, political and social transformation. It is seen as all the processes that translate into the reduction in abject or absolute poverty, reduction in the level of unemployment, reduction in the level of personal and regional income inequality, increase in the real output of goods and services, improvements in the techniques of production, improvements in literacy, health services, housing conditions and government services, improvement in the levels of social and political consciousness of the people and greater ability of the people or the general population to draw from the local resources (human and materials) through hard work to meet both the local and external needs. Cameroon, like many other developing countries is in dire-need of sustained and uninterrupted development. Although most studies in economics have focused more on economic growth than economic development, in this work, we have acknowledge the fact that growth could be realised without development but development is inconceivable without economic growth. This therefore, means that the growth of output per head or per capita income is regarded as important ingredient or indicator of economic development and has been used by many scholars.

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Based on augmented neo-classical (Cobb-Douglas) production function we observe that development is promoted in Cameroon through the mobilisation of factors input such as capital (K), Labour (L), Land (S), energy supply (E), technology, technical and economic efficiencies. The effective and efficient use of labour resources or human capital for greater productivity, as an example, means that the workers are not only well trained and skilful, but it also symbolises the existence of harmonious relationship between workers, management and working environment. In this work, consider to exist under the working environment are the university students/lecturers, government policy, teachers, drivers, state workers, private sector workers and any factor outside labour which had caused lost of man-days in Cameroon excluding traditional ethos.

Labour as it started in England in 1816 forms unions to present a common front to face the management or employers as a possibility to eliminate exploitation or any form of imperfection in an organisation or due to the absence of harmonious relationship between employees and employers. The inability in any collective bargaining by the employers to solve any conflict arising between workers and itself might result to what it is always called industrial actions or strikes, which might take different forms. However, strike in this work is not limited to industrial actions but any activity outside traditional ethos, which has caused man-days lost in Cameroon. It started in Cameroon in 1990 with the emergence of multi-partism tagged “ghost town operations”. Although political motivated, its inclusion in this work is based on the ground that it resulted to work stoppage and lost of unearned incomes.

This study like that of Nyong (1998) uses estimated man-days lost per year since the use of number of strikes would be inappropriate on both theoretical and empirical grounds. Nyong observes that theoretically, the number of strikes may not necessarily affect economic development seriously if the duration of the strike is only a few days because the lost hours can be made up for by overtime when the strike is over. Therefore, for strikes to affect the economy seriously, the duration of the strikes must be significant.

The issue concerning the emergence of strikes in Cameroon with the birth of multi-partism in 1990 have been well discussed in popular press both in English and French languages though there have been no systematic analyses of its effects on economic development. This study may be considered as the first of its kind, as an exploratory and systematic attempt to quantify the effect of strikes on economic development of Cameroon. It also has the ability to provide further insight into the determinants of strike activity in Cameroon given the fact that the syndrome is in progress. However, we hereby hope that the results from this study will be fully utilised by policy makers, employers and the human job environment to prevent further strike actions in Cameroon. Considering the magnitude of the outputs lost in terms of per capita income arising from strike activity, the factors influencing strikes, there is need to study the phenomenon with more heat than light.

The rest of this paper is organised in five sections as follows. Section 2 provides a brief review of the nature and frequency of strikes in Cameroon since 1990. Section 3 reviews the theoretical framework and related literature; section 4 presents the analytical methodology, which articulation goes to include specification of the econometric model and validation. The empirical results and analysis of results are

provided in section 5, with summary of major findings, policy recommendations or implications and conclusion ending the study in chapter six.

2. Frequency and Nature of strikes in Cameroon

If not told, a visitor from for example a neighbouring country, Nigeria could think Cameroon is always on strike. This is because of the timid nature of business activities that are taking place in the country except in very few towns like Douala, Bamenda, Bafousam, Yaounde, Kumba, Limbe, Garoua, just to name these few. Most of the towns are active only in the night say between 7:00pm and 11:00pm. This is to say even when there are no official announced strikes; the economy of Cameroon is always in “Kumato” outside the periodic market days.

However, Cameroon has experienced increasing strike activity since 1990. That is the period associated with multi-partism. Multi-partism seems to have led the cat out of the bag and till then, politicians, teachers, taxi men, firm workers, students etc are observed agitating for improvement in national welfare conditions or conditions of serve associated with their environment. As pointed above, note should be taken here that the scope of strike in this paper is not limited to industrial actions but its extents to include any activity, be it social and political rancour, which have caused man-days lost. They all have economic theoretical underpinning in that, lost of income or output based on such activities has already been observed. Thus, noted in Cameroon as strike activity within our scope are;

The Matgerie workers strike of December 24 1993, the Fako taxi drivers strike of Friday January 1993, the SOTUC workers strike of April 1993 for four months unpaid salaries. The Dschang university workers strike of 1993 for 6 months non-payment of wages and salaries as well as allowances. Pamol workers strike of Thursday August 27 1992, which resulted to 3 million properties lost. The lawyers strike of November 5th 1992 advocating for independent judiciary. The Tanker drivers strike of 11 to 13 January 2006. The Tole Tea workers strike of 18th – 20 January 2006. SOWEDA workers strike on Monday 6th of February 2006.

Therefore, different forms of strike activity have occurred at different times in the nation’s economic history since 1990. The greatest national strike that has ever taken place in Cameroon is that of the “operation ghost town” of 1992, which resulted to over CFA 70 billion unearned revenue (Cameroon Tribune, Monday January 4, 1993). The strike was active in all the towns in Cameroon except in Yaounde, the political capital of Cameroon. Although some parts of the country actually did not play active part in this strike, they were still strongly affected by the ghost towns operation because of the interdependency of the Cameroon economy. The consequences of the strike was the drastically reduction of government revenue and the inability of the government to pay civil servants’ salaries for more than six months. Then came the teacher’s strike of 1993. This lasted for three months. The strike helped as some of the demands of the teachers were met such as the reorganisation of university of Buea in 1993 and the creation of the GCE board in 1994. Cameroon Development Corporation workers’ strikes, which have been very disjointed but more rampant within 1989 and 1995. For example, two strikes occurred in CDC in 1991. That is one at Bimbia section of Mabeta Rubber Estate in May 1991, lasting for two days, and another on the 13 June, when workers of Ndu Tea Estate refused to go to work, requesting prompt payment of their family allowances and a refund of their compulsory savings among other grievances. A total of 29.992 man-days were lost in CDC as a result of the 1991 strikes. Also of note is

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the Kompina Rubber Estate strike of 14/2/1994 that, resulted to 2,712 man- days lost and many more. The university of Yaounde students strike of 1990, 1991 and 1992 created a great impact on human history. Although the lecturers on their part have remained as bulldogs over their welfare situations, it is clear that when students are on strike, they are equally unproductive even though some claim they are researching. University students' strike came up again in 2005 with all the universities except that of Ngaoundere going on strike. Of all the university students' strikes, that of the University of Buea lasted for about two months May and June resulting for about 115.471 man-days lost. Taxi-men strikes have also featured many times in Cameroon since 1990. In 2005, specifically on January 28 to February 19th, the general nation wide taxi drivers' strike was announced. Although it was not effective in Yaounde, it was more than 80 percent effective in other towns especially in Bamenda, Buea, Kumba, Douala, Bafoussam etc. It was reported that Post Office customers sealed and blocked with stones the main gates of Kumba Post Office on May 13, 2005. Similar exercise occurred in Buea on May 17th to 20th the same year. In both cases, the customers were protesting against the unsatisfactory payment of their saved money. From November 27th to 30th, classes were disrupted in Yaounde University I as students called for the abolition of school fees of 50.000frs CFA as the same time demanding for better learning conditions. Truck transporters announced indefinite strike on the 26th of December 2005, which went operational and was only call off on 16th January 2006. The over 12.000 heavy-duty vehicles as well as some 3000 lorries owned by transportation companies and individual grounded their services to the nation based on the failure by the government to redress their grievances. Junior researchers of the Ministry of Scientific Research and Innovation also announced an indefinite strike on Friday 17 of June 2005 over 37 months of unpaid salary arrears. There are endless lists of striking activity, which have taken place in Cameroon since 1990 based on our definition of strike. See Table 1.1 on the Appendix for the summary of strike and political protest in Cameroon.

From the above, we observed that strike actions in Cameroon have been induced by many factors ranging from economic, political, organisational and institutional factors. The economic factors have consistently included the demand for salaries and arrears, the demand for better working conditions, the demand for better salaries and wages. Mostly arising from increases in the cost of living and environmental conditions. Good examples of strikes associated with environmental factors are the university students' strikes. While in 1992 the general operation ghost towns strike or protest resulted in the tripartite conference headed by the then Prime Minister Sadou Hayatou, the university strike also resulted in the creation of the David A. Commission, whose reports are suggested to be the present reshufflement in universities in Cameroon today.

Worth pointing out here is the fact that there are still propensities of strike actions building up in many sectors in Cameroon especially in the public sector. Although the recent civil servants strike was called off based on the ground that government main objective for this year is to meet the completion point of the highly indebted poor country (HIPC) Initiative, Cameroonians are anxiously waiting the miraculous transformation in the economy of Cameroon now that she has met the HIPC Initiative's completion point. So far, the operation ghost towns in Cameroon can be regarded as the most serious in the annuals of the country's strikes. Therefore, table 2.1 indicates the nature of man-days lost as a result of strike actions in Cameroon since 1990.

Table 2.1 Trends in the incidence of strike activity in Cameroon.

Year	Trend of Strikes	Work	Workers	Man-days	Inflation	Real GDP Growth/CPI
1984	NA	NA	NA	NA	11.3	10.7
1985	NA	NA	NA	NA	1.3	20.6
1986	NA	NA	NA	NA	7.8	-1.7
1987	NA	NA	NA	NA	5.9	-11.1
1988	NA	NA	NA	NA	8.6	-17.4
1989	NA	NA	NA	NA	0.9	-2.7
1990	43	55	800	141	9.3	-14.4
1991	18	65	753	349	5.7	-6.1
1992	775	234	9.958.800	96.524.000	0.3	-4.7
1993	230	201	9.457.600	67.423.400	1.9	-3.4
1994	171	131	9922	301809	0.4	20.7
1995	132	49	8800	117643	7.1	8.1
1996	150	40	2753	461325	7.3	3.7
1997	352	53	2321	142503	5.7	3.2
1998	258	38	1340	230612	7.4	-1.6
1999	340	14	9401	534966	18.1	-10.2
2000	116	80	4915	1339105	0.6	9.4
2001	143	102	8138	96616	5.1	2.9
2002	78	117	6510	63945	4.9	1.7
2003	87	124	5760	461443	9.8	2.2
2004	144	90	3975	142506	13.4	1.8
2005	174	134	6546	165901430	15.6	2.4

Sources: International Financial statistics (IFS) year book 2000. Ministry of Economy and Finance. Department of statistics and Accounting. African Development Indicators and International Monetary Fund (IMF). Newspapers reports NA= Note Available, CPI=Per Capita Income.

It is recorded that, Economic Crisis identified itself with the economy of Cameroon since 1984. The reaction to that was the closure of firms and companies especially in the economic capital Douala. This hardship continued till 1998 when majority of Cameroonians were fate off with the New Deal Regime, as such the emergence of high degree of opposition against the New Deal Government. It was from this same period that strike became a known concept in the economy of Cameroon. From table 2.1 an estimated number of work stoppage, workers involved and the number of man-days lost are clearly shown. The figures show that in recent days of Cameroon, strikes are becoming more frequent although the greatest of it was recorded in 1992 and 1993, the period of ghost towns. Of course, these are unwelcome situations for any economic that needs growth and development. This is justified by the poor real growth of the GDP/Per Capita as shown in the same table 2.1. Given the fact that inflation rate is a strong indicator of the cost of living and investment decision goes with critical examination of the inflation rate and the rate of turnover, we also present this inflation rate, which is the first deferential of the complex consumer price index in table 2.1 The trends of inflation rate and that of the real GDP are as expected. They also justified the frequency of strikes in both public and private sectors of the Cameroon economy.

3.0. Analytical Methodology

This study covers the period of 16 years starting from 1990 to the year 2005 because this period is associated with the emergence of economic crisis, strike real growth Per Capita Income and high level of fluctuation in the consumer price index in Cameroon. It is also within this period that most of the variables needed for this study are available. The augmented neoclassical production function is developed to link the Cobb-Douglas two factor variables (Labour services and employment of capital) to output, working days lost and absorptive capacity of the nation as additional factors accounting for the variations in output in Cameroon within the period of our study. Secondly, the time series properties of the data used in the regression are examined to eliminate any cases of spurious regression (Granger and Newbold 1974; Phillips, 1986. Engle Granger, 1987). The technique adopted involved the augmented Dickey – Fuller tests for the unit root test. Granger and Newbold have revealed that ordinary least squares estimates or parameters for non-stationary series in regression do not converge to constants and that the usual t- and f- ratio test statistics do not have the limiting distribution (Nyong, 1998). Hence, their use in this case generates spurious inference.

As such, our models are specified in the first differential forms to eliminate the effect of cultural factors, which must have affected our selected parameters within the period of our study. Thirdly, the regressions equations were run in the logarithm (L) form for the non-rate variables to enable us interpret our results as elasticities and a regression equation was run on the determinants of strike to provide an insight into the factors influencing strike activity in Cameroon and the degrees at which each factor does so. Going by the giant strike in Cameroon, that is the operation ghost towns of 1992, it was expected that there would be a once-for-all gross domestic product lost in that year because of the higher number of work stoppages, followed by a further reduction in economic growth in subsequent years as a result of the lingering effect of this giant strike. However, given all the above conditions. The econometric specification of the model is articulated in equation (3.1) and (3.2) as shown below.

$$\Delta \text{LRGDP}_t = A_0 + A_1\Delta \text{LRGFCF}_t + A_2\Delta \text{LPOP}_t + A_3\Delta \text{LSTRIKE}_t + A_4\Delta \text{ABSOP}_t + A_5\Delta \text{LCORRPT}_t + A_6\Delta \text{LEXDEBT}_t + U_1 \quad (3.1)$$

$$\Delta \text{LSTRIKE}_t = B_0 + B_1\Delta \text{LINFLA}_t + B_2\Delta \text{LRWAGE}_t + B_3\Delta \text{UNEMP}_t + B_4\Delta \text{LPOLISAB}_t + B_5\Delta \text{LODR}_t + U_2 \quad (3.2)$$

A priori, $A_0 > 0$, $A_1 > 0$, $A_2 > 0$, $A_3 > 0$, $A_4 > 0$, $A_5 < 0$, $B_0 > 0$, $B_1 > 0$, $B_2 < 0$, $B_3 > 0$, $B_4 > 0$ and B_5

Where;

RGDP_t = Real GDP in current period

RGFCF_t = Real Gross Fixed Capital Formation in current period

POP_t = The Growth of Employment Rate in Cameroon in current period (proxy by population growth rate)

STRIKE_t = Strike Activity in Cameroon Measured by the number of man-days lost per year in different sectors in current period.

ABSOP_t = Absorptive capacity used as proxy for efficiency parameter in current period obtained as $\text{GDP}_{n+1} - \text{GDP}_n / \text{GDP}_n$

CORRPT_t = Corruption in Current Period using corruption index provided by Transparency international.

EXDEBT_t = External Debt Servicing as a ratio of GDP in current period

INFLA = Inflation in current period.

UNEMP_t = The Growth of Unemployment rate in current period.

RWAGE = Real Wage rate in current period.

POLISAB_t = Political instability in current period measured as dummy, which takes the value of one in years of expected or realised political rancour and zero otherwise.

OPRT_t = Oppressive Tendency measured by the estimated number of roadblocks checkpoints in current period. Forgha

Δ = Stands for first differential of the variable in our questions, which shows limited losses in the parameters caused by short-term adjustment problems.

"L" is natural logarithm. A_0 to A_6 are the estimated parameters for equation (3.1) while B_0 to B_5 are those for equation (3.2). U_1 and U_2 are the stochastic error terms with their assumed normalities.

3.1. Justification for the Inclusion of the Above Variables in our Models, their definitions and Trends.

Strike model (equation)

With respect to the specification of strike and development models, we did not intend to select any particular proffered theory or framework but instead we have considered factors, which are said to hold in Cameroon as discussed in the Literature. With specific consideration given to our equation 3.1 (strike equation), the working definition of strike in this work is not limited to industrial actions, but goes to include any activity in Cameroon between 1990 and 2005, which has led to man-days lost outside cultural factors. Given the difficulties in measuring strike, we in this work like that of Nyong (1998) used estimated man-days lost per year since the use of numbers of strikes is inappropriate on both theoretical and empirical grounds and worse of all there is no available recorded statistics on it in Cameroon. From table 2.1, the total of man-days lost accorded to strike was 141 in 1990. This rose to 349 man-days lost in 1991 and due to the ghost town operation, which is the giant strike ever recorded in Cameroon, a total of 96524.000 man-days lost was recorded in Cameroon. Although the number of man-days lost accorded to strike has been on the decrease since 1994, our figures show that strike has reoccur frequently in the recent past. See trend in the appendix.

A study carried out on Mali by Barro and Lee (1994) sponsored by World Bank, used numbers of Gendarme employed as oppressive tendency by the government. They argued that Gendarmes are not African indigenous force, as such they are colonial master (France) usually employ to suppressed unaccepted growth and development of their colonies. Although it has been argued that this force also maintain peace and security in their various countries and also provide employment opportunity to those who joined it, the question then is what about countries in Africa without this force, are peace and security not existing in these countries? A critical look into the continent of Africa, one could observe that mobility and freedom are at sake in all the French colonies where Gendarme is a special force than otherwise. However, in this work we have projected a frictional non-natural variable, which is the number of roadblocks or checkpoints as proxy for measuring oppressive tendency by authority, as supported by the power theory of poverty which claims that the ruling class legitimises an exploitative tendency through which it determines the allocation of opportunities, income and wealth using the apparatus of the state. Based on this we have used the estimated numbers of official roadblocks or checkpoints in Cameroon as proxy in measuring oppressive tendency on the masses. From the Ministry of Territorial Administration and Decentralisation, it is in record that the official number of checkpoints in Cameroon for 1990 was 3,860 and this number rose to 4.526 during the period of ghost towns. Comparing the numbers of checkpoints and value for the growth rate of per capital

income, we observe that increase in the numbers of checkpoints result to fall in productivity. This relationship is also established in the cases of numbers of checkpoints and man-days lost.

As a measure of political instability, the use of growth trend of opposition parties has been adopted by many studies especially Knack and Keefer (1995). To them, Forgha in the numbers of opposition parties in a country is not a good Omen or indication of democratic tendency but a reveal of high level of political instability motivated by the divide and rule mechanism in a country where there exist numerous tribes. Based on our econometric technique (two-stage least squares) we have used dummy, which attracts one in years of political rancour or expected and zero otherwise. The inclusion of inflation, real wage obtained as nominal wage, inflation ratio and unemployment obtained as the growth trend of unutilised labour force are based on labour and productivity theories. Therefore, strike is specified as a function of inflation rate, real wage rate, unemployment, political instability and oppressive tendency with their a priori theoretical expectation as presented above.

Economic Development Equation

According to Kahn (1984) as a rigorous analysis of the relationship between economic development and strike began with Bhagwati (1982). Economic Development, which is very difficult to measure, has been proxied in many studies using per capita GDP, which takes into consideration the population growth and the trickling down effects of national income over the periods of its consideration. In a specific case, a rapid economic development is liable to be adversely affected by high degree of incidence of strike (Kahn, 1994). The strike literature suggests that its incidence is also likely to be associated with the extent of oppressive tendency, political instability real wage, unemployment and productivity *ceteris paribus*. We would expect that an economy, which has high absorptive capacity measure by marginal efficiency of capital, high fixed capital formation high level of manpower training and utilisation would tend to have high trickling down growth and development. On the other hand, under corrupt situation, the revenue directed to the government is liable to exacerbate growth and development. Hence, in this work economic development is specified as a function of real growth rate of capital formation, absorptive capacity, strike, quality labour growth and external debt servicing, which has the ability to reduce domestic investment on foreign exchange earnings. See their trends on figures 1.1 and 1.2 on the Appendix

The Cobb-Douglas production functional form, which imposes a constant return to scale, is applied in equation (3.1) to explain the variation in total production or output per capita GDP in the economy over time in terms of variations in the levels of capital (Gross Fixed Capital formation) and workers employed. This is augmented by the introduction of the strike activity (STRIKE) measured by the number of man-days lost per year in different sectors of the economy, absorptive capacity, corruption and external debt servicing. Equation (3.2) provides the model for determining the factors influencing strikes in Cameroon. These include the cost of living variable (inflation), the real wage rate (RWAGE), the unemployment rate (UNEMP), political instability measured as dummy in Cameroon and oppressive tendency proxy by the growth rate of number of roadblocks within our period of study. Generally, the real wage and price variable measure the propensity to strike. Unemployment measures the extent to which workers can minimise costs to themselves while imposing large costs on the employers, political instability and oppressive tendency are seen as Cameroon specific factors although common with French colonies.

3.2. Scope, Sources of Data And Limitations

As presented above, this study covers the period of 16 years ranging from 1990 to 2005 inclusive because of reasons already advanced. The substantial data required by this study were actually drawn from secondary sources such as those extracted from the Ministry of Economy and Finance, Department of Statistics and National Forgha (DNCS), Central Bank for Central African states (BEAC), African Development Indicators (ADI) various issues, International Monetary Fund (IMF), International Financial Statistics year books, World Development Report 2003, World Table 1989 to 2003, news paper publications, journals, readings and internet, various web sites.

As a point of note in this work, is the fact that data limitation resulted from loss in absolute magnitude of some of the variables due to rounding-up and approximations, data inconsistencies and the long-time lags in reporting or compilation of certain information make it difficult for real GDP per Capita and strike to response to certain policies measures. However, the treatment of the data by providing the adjustment mechanism has improved their degrees of responsiveness. Acknowledge here is also the fact that Cameroon has a large informal sector where most of the economic activities are not recorded couple with the lapses of the centralised system of administration. However, our results are not affected based on the methodology adopted in the study.

3.3. Estimation and Validation

The technique employed in the estimation of the coefficients of our explanatory variables is the ordinary least squares (OLS) technique. However, it has been shown that the (OLS) regression estimates with non-stationary time series data often produce unacceptable result even though it may record high coefficient of R^2 or adjusted R^2 . Such R^2 or adjusted R^2 is always associated with very low Durbin-Watson (DW) indicating high degree of autocorrelation. Although many analyses of unadjusted non-stationary series have been carried out on the assumption that non-stationarity would not matter, but such results are nonsensical (Yale, 1926) or spurious regression (Granger and Newbold, 1974). Therefore, this study adopts the co-integration-Error Correction methodology to estimate equation (3.1) and (3.2). This selection of OLS technique is based on the fact that according to Gauss-Markov theorem, it yields the best minimum variance. However, if the variables are non-stationary, the desirable properties of efficiency, consistency and unbiasedness will be lost, which could lead to spurious results and inferences, inaccurate predictions, hence, co-integration and error correction model (ECM) is used in this work because it is going to add richness, flexibility and versatility to the econometric modelling and integrates the short-run dynamic with the long-run equilibrium. Furthermore, accurate predictions are expected on the economic relationship between the variables.

The order of integration ascertained the number of times a variable will be differentiated to arrive at stationary results, that is $1(0)$ is the starting point for the ECM. The tests for stationary employed in this work are the augmented Dickey-Fuller and the Phillips-Perron tests. They are constructed to test the null hypothesis that the variables in our questions are non-stationary, meaning that they are integrated of the order one, (1) . The co-integration is accepted when the residuals from the linear combination of non-stationary (1) series are themselves stationary, $1(0)$. This acceptance of ECM means the model is best specified in the first differences of the variables. If the specific form of the Dickey-Fuller test used is

$Y_t = \alpha_0 + \alpha_1 Y_{t-1} + U$, then the test, which is carried out on the magnitude of the coefficient of α_1 is expected to be equal to or greater than 1, for there to be unit root. The value for α_1 less than unitary indicates stationarity (mehra, 1991, Adam, 1992).

4.0 Presentation and Discussion of Empirical Results

Stationarity and co-integration (Unit Root) Tests. A proper examination of c Forgha regression results; show that inconsistencies exist in all of the variables in our This therefore, warrants the application of the necessary test on the data to be used. The results of the unit root tests are therefore presented thus:

Table 3.1. Test of Order of Integration (Unit Root Test)

Variable	Augmented Dickey-Fuller		Phillips Perron		Decision rule
	Without trend	With trend	Without trend	With trend	
Δ LRGDP	-4.21675	-2.451537*	5.9769	-2.56313*	1(0)
Δ LRGFCF	-4.65311	-2.401478*	-1.0689*	-2.9007*	1(0)
Δ LPOP	-3.66241	-2.04248*	-7.3221	-3.0461*	1(0)
Δ LSTRIKE	-3.23645**	-2.61479*	-2.94995*	-1.9094*	1(0)
Δ LABSOP	-3.62110**	-1.23857*	-0.10704*	-0.04631*	1(0)
Δ LCORRPT	-5.00967	-3.17541*	-0.41841*	-0.00319*	1(0)
Δ LEXDEBT	-1.05483*	-2.45417	-0.41841*	-0.3641*	1(0)
Δ LINFLA	-4.9426	-0.835752*	-5.24711	-2.5993*	1(0)
Δ LRWAGE	-0.43004*	-2172802*	-2.6877*	1.6464*	1(0)
Δ UNEMP	-3.56961**	-2.71361*	-0.38747*	-0.3481*	1(0)
Δ LPOLISAB	-5.36818	-2.56613*	-6.7728	-3.0776*	1(0)
Δ LOPRT	-6.3641	3.01714*	-1.0560*	-0.6278*	1(0)
Critical value	-	-	-	-	
5%	-3.6752	-4.3082	-3.6661	-4.2949	
1%	-2.9665	-3.5731	-2.9621	-3.5670	
1 st difference	-	-	-	-	
5%	-3.6852	-4.3226	-3.6752	-4.3082	
1%	-2.9705	-3.5796	2.9665	-3.5731	

Source: Computed by Author from the ordinary least squares regression results.

* = Shows significant at 1 percent level ** = Shows significant at 5 percent level.

That is the null hypotheses are rejected at * for 1 percent level and ** for 5 percent level.

The above results show that all the explanatory variables attain stationarity 1(0) at their first differencing. This also shows that the explanatory variables trended in a consistent form showing that there exists long-run relationship between them.

Table (3.2)

Presentation of the Ordinary Least Squares Co-integration Error Correction Results.

Dependent Variables: Economic Development. Number of Observations 16.

Variable	Coefficient	Standard error	T-value	P-value
Constant	2.2349	10.868	0.20563	[0.839]
Δ LRGFCF	0.2859	0.1668	(1.7149)**	[0.098]
Δ LPOP	0.5553	0.17358	(3.1990)*	[0.005]
Δ LSTRIKE	-0.4386	0.8883	(-2.6862)*	[0.014]
Δ LABSOP	0.05258	0.10454	0.50293	[.621]
Δ LCORRPT	-0.76543	0.20859	(-3.6694)*	[0.001]
Δ LEXDEBT	-0.34419	0.65833	(-2.4703)*	[0.021]
ECM (-1)	-0.7656	0.20859	(-3.6694)*	[0.001]

$R^2 = 0.979213$ F statistic(7.10)=16.875, D.W.=1.90732

Table (3.3)

Dependent variable: STRIKE Number of observation: 16

Variable	Coefficient	Standard error	T-value	P-value
Constant	8.3484	0.50599	(16.499)*	[0.000]
Δ LINFLA	0.5977	0.0859	(6.338)*	[0.000]
Δ LRWAGE	-0.3711	0.1598	(-2.4359)*	[0.015]
Δ UNEMP	0.75868	0.0924	(8.1690)*	[0.000]
Δ LPOLISAB	0.42260	0.07564	(5.5862)*	[0.001]
Δ LOPRT	0.82508	0.06645	(12.020)*	[0.000]
ECM (-1)	-0.825508	0.70781	(-7.3103)*	[0.000]

$R^2 = 0.85569$ F statistic = 64.885, D. W. =2.1884

Note: The numbers in parentheses are t-values. The asterisks marked against each coefficient show the level at which the coefficient is significant. *, Significant at 1 percent level, **, significant at 5 percent level, ***, significant at 10 percent level. ECM (-1) indicates error correction model based on Engle and Granger (1987). The dependent and independent variables adjust to equilibrium or achieved stationarity when the coefficient of the ECM is less than unity.

5. Discussion of the Empirical Results

From the above regression results, (Table 3.2 and table 3.3) our R^2 adjusted are more than 97% for the real growth of GDP Per Capita equation and more than 85% for the strike determinant's equation. This shows that 97% of the variations in economic development measured here as real growth rate of per Capita GDP in Cameroon is accounted for by the variations in the variables specified in our economic dev Forgha equation with less than 3% accounted for by the stochastic error term. On the other hand, the variables specified in the strike determinant's equation reveals that variations in strike in Cameroon is accounted up to 85% by the variables specified in that equation with less than 15% accounted for by the disturbance term. Both f-statistic show that our results are more than 95% reliable. Both D.W also show that no autocorrelation exist hence, the stability of our result. Clearly seen in the above results is the fact that the speed of adjustment in the development function is 77% while that of the strike function is 71%. This means that ignoring co-integration, the non-stationary time series data could have led to misspecification in the underlying process to achieve stability in economic development in Cameroon. The coefficients of DLRGFCP, ALPOP and LABSOP are positive in the development equation. This shows that increase in these variables will result to increase in economic development in Cameroon. Precisely, the result reveals that 10 percent increase in real gross fixed capital formation (RGFCF), employment (pop) and absorptive capacity (ABSOP), the economy of Cameroon will improve by 2.9, 5.6, and 0.5 percent respectively. The coefficients of RGFCF and POP are statistically significant meaning that they must be taken into considering if development is the priority of the Cameroon government. Although the coefficient of ABSOP is positive, it is not significant as such explaining the fact that a lot of inefficiency exists in the utilisation of the country's resources. Thus, improvement in resources utilisation directly means economic growth and development. Still in the economic development equation, the coefficients of strike, corruption and external debt payments as a ration of GDP are negative meaning these variables retard our growth and development. Specifically, the results show that 10% increase in these variables will result to 4.4, 7.7 and 3.4% fall in economic development respectively. These results are statistically significant meaning that they are very instrumental in determining our development path.

All the variables specified in the strike function are positive except the real wage variable. This shows that over the years, strikes in Cameroon have been induced in one way or the other by price instability (inflation), high rate of unemployment, political instability measured as a dummy and oppressive propensity measured by the estimated number of roadblocks or checkpoints. Precisely, the results show that 10% increases in these variables have the propensity to motivate strike by 5.98, 7.6, 4.2 and 8.2% respectively. Increase real wages has the ability to reduce strike tendency up to 37%. All the variables specified in the strike function are statistically significant meaning that they are instrumental in providing solution to the striking syndrome observed in Cameroon for some times now.

6. Summary, Policy Recommendations and Conclusion

Cameroon as said before is in dire need of development. This cannot be achieved under strike actions and political protests. This is because strike has reported a negative relationship with development among other macroeconomic variables such as corruption and inflation. With respect to the determinants of strike activity in Cameroon, this study reveals that both macroeconomic (inflation rate, unemployment rate) and non-

economic (oppressive forces, political instability) variables have had statistically significant effects on strike in Cameroon. It can be concluded that strikes occur as a result of these and other factors. Therefore, the policy implications from our findings reveal that:

- There is the need to prevent a recurrence of strikes of such magnitude as those following the operation ghost towns where so many sectors of the Cameroonian economy were involved at the same time. This must be through the respect of the democratic rights of the people, which goes beyond the right of oppression. Forgha freedom of workers and students to choose their own leaders, the respect of constitutions that of course must be designed to suit national interests. In all, we advocate for good governance that will uphold democratic principles and provide a more conducive environment for economic social *cum* political interactions.
- Perhaps, far more important is the need to realise the critical role of price increases against the background of low wages and salaries. The total package of wages, salaries and benefits has eroded substantial in real terms since 1984, the period of devaluation of the FCFA. This general price up trend, which has been motivated by transportation cost, government fixed prices, taxation, corruption, consistent increase in fuel prices etc are retarding growth variables. Therefore, we are hereby advocating that government of Cameroon should help minimise strike and promote economic growth through increase in real wage rate, reduction in fuel prices (Petrol, gas, and kerosene), reduction in cost of building materials (cement, zinc, plywood etc) reduction in public school fees and increase basic salaries to civil servants as well as allowances.
- Government should increase family allowances within a limited number of childbearing capacities for any household in Cameroon. Pension scheme should also be revisited and payments should be made monthly and regularly
- The government of Cameroon is also expected to set up a trade social/political dispute acts, which ought to give some provisions for the management of these disputes mentioned above. By this, management and workers/students are to first attempt to settle their differences internally. If they failed, the law should make it mandatory for them to invite a mutually agreed third party as mediator to help resolve the differences within five days. If the mediation effort failed, the law should require that the dispute be reported to the Ministry of Labour and Employment, which is expected to appoint a conciliator who is expected to resolve the dispute within five days. Should the conciliation fail, the dispute is expected to be referred to an Industrial Social/Political Arbitration Panel (IAP), which within 5 days should provide its verdict. If no settlement is arrived at, the dispute could then be taken to National Industrial Social/Political Court whose verdict is binding and must be made known within 14 days. Although this process is cumbersome, it is very useful under a democratic regime.

- There is also the need for the government to encourage job creation through reduction in taxes on industries and firms based on the number of their employees. Government also need to pay emphasis on wages and salaries than focusing more on a rewarding system, which encourages corruption, and inflectional adjusted. Collective bargaining should be encouraged at all levels of the government with the expectation that it will lead to industry-wide agreements as such reduce the antagonism that must have existed between employers and employees and students and management.

Therefore, in this work, we call for good governance, maintenance of price stability with low rate of inflation, increase in basic salaries and allowances, job creation, reduction in the number of roadblocks and the creation of National Industrial Social/Political Arbitration Panel (NISOPAP) in Cameroon.

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APPENDIX ONE

Table 1.1 Summary of Strike observed in Cameroon

Year	Sectors		Workers involves	Man-days lost
	Private	Public		
1990	GCE markers Strike	University Y'de I, GEC markers Strike and Pamol	800	141
1991	GCE markers, CDC Lawyers and Universities Student Strike	GCE markers, CDC Lawyers and Universities Student Strike	753	349
1992	Ghost town	Ghost town	9958800	96524000
1993	Matgerie, Fako Taxi drivers, SOTUC and Dschang University Strike	Teachers strike	9457600	67423.400
1994	Taxi Drivers strike	CDC Kompina, Rubber Estate	9922	67423.400
1995		CDC Ndu Estate	9922	301809
1996	Taxi Driver and Byke in Douala	Mukonje CDC Rubber Estate	8800	117643
1997		CDC Djuttissa Tea Estate	2753	461325
1998		CDC Likumba Palm Estate	2321	142503
1999	Taxi Drivers in Yaounde	Mamfe post office	1340	230612
2000		Post office Nation wide	9401	534966
2001		Post office Customers	4915	1339105
2002		Post office Customers	8138	96616
2003	Nation wide Taxi Drivers		6510	63945
2004	Heavy Duty Vehicles and some Lorries	Cameroon Air Line	5760	461443
2005		Junior Researchers strike	6546	165901430
2006	Tanker Drivers, Tole Tea workers and SOWEDA workers	Universities, Taxi Drivers Nation wide, Kumba Post office Customers, Buea post office customers and Bamenda Post office customers		

FIGURE 1.1

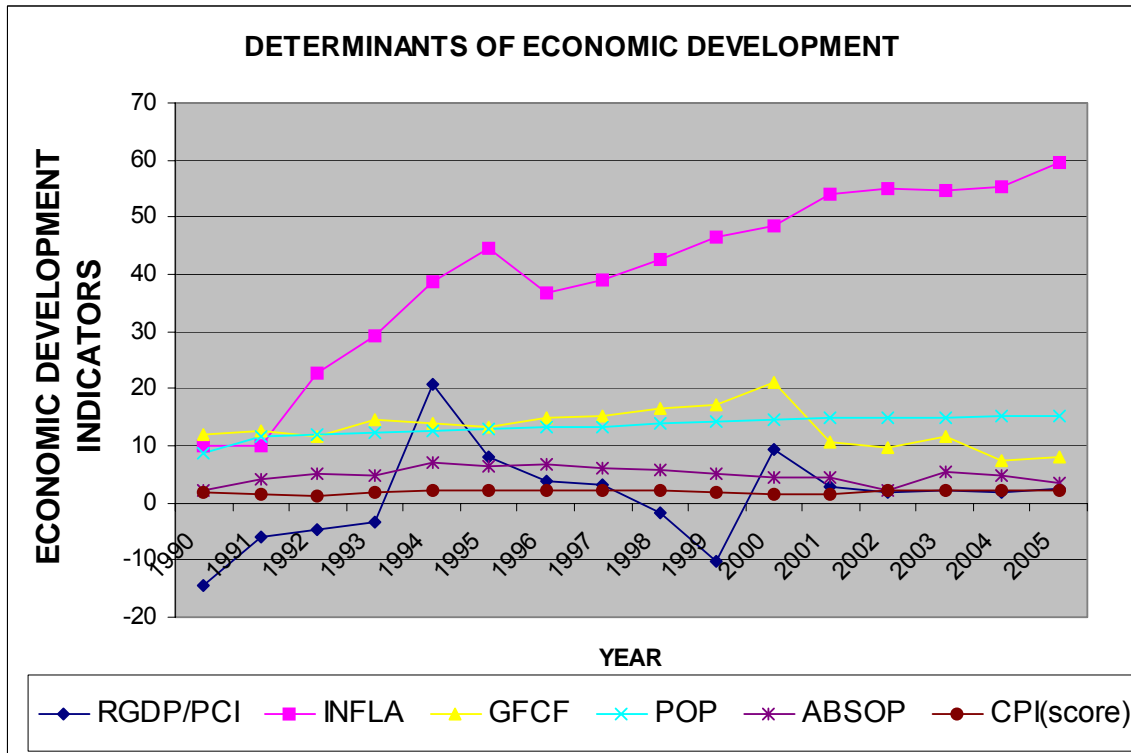


FIGURE 1.2

