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Impact of public expenditure arreaes accumulation: effects on national economies and private sector in particular

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IMPACT OF PUBLIC EXPENDITURE ARREARS ACCUMULATION: EFFECTS ON NATIONAL ECONOMIES AND PRIVATE SECTOR IN PARTICULAR

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Short summary

The main purpose of our study is to assess the possible effects the accumulation of public expenditures arrears had on economic growth, especially on private sector in the Republic of Cameroon from 1980 to 1999. To achieve our objective, we used descriptive method and analyzed the possible correlation between economic aggregate and payment arrears accumulation. The indicator, which has been taken into account, is the ratio stock of arrears to general government final consumption to fit with PEFA measurement and detect the essence of payment arrears in Cameroon. Our results show that, in Cameroon, there was payment arrears accumulation, and this had negative impact on Cameroon's economic growth and the private sector, in particular, during the period mentioned above.

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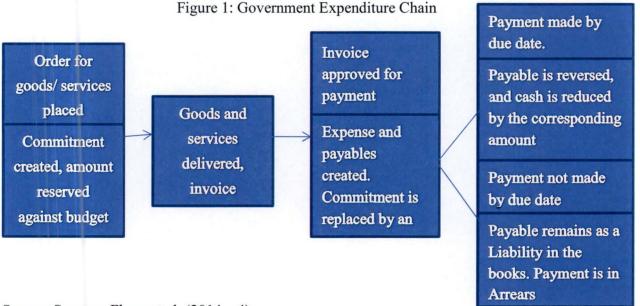
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1. INTRODUCTION

The issue of public expenditure arrears accumulation has long been one of the critically unresolved problems faced by many countries and is interconnected with insolvency in the public and private sectors which are multiplied and spread throughout the entire economy, creating financial problems for other firms and sectors as well. The public expenditure follows some administrative rules and procedures in order to be executed legally. However, some public authorities figures may seem to be weak in the face of corruption and the problem of arrears appears through the mismanagement of public funds. In accordance with the government payment procedures, overall, the payment cycle is done as defined by the figure below:



Source: Suzanne Flynn et al. (2014, p4)

The government expenditure chain figure above illustrates the public buying-payment cycle starting by ordering goods and services in respect of available budget. When those goods and services are delivered and approved, the payment procedures follow in respect of the payment schedule as determined by the law. Differences between these financial management stages can provide indication on payment delays and arrears (Flynn et al., 2014).

The approval for payments is followed by the actual payments and recorded in book of accounts, while any unpaid amount beyond a specified payment period is recorded as outstanding liability awaiting payments. Those remaining amounts are arrears and are defined as payables that have

remained unpaid after a specified number of days after the date on the invoices or contracts by laws, regulations, government payment policies, or local practices (Flynn et al., 2014).

1.1 Background of Study

The government decisions on the speed of paying their bills on time have important repercussions for the economy (Momigliano et al, 2015). The public expenditures are one of the aggregate demand components; they affect private demand and influences aggregate supply. The accumulation of the public expenditure arrears found to be corruption and weak institutions (Maureen 2001, Crivelli et al. 2016).

Many empirical studies discussed the effects of public expenditure arrears and found them to negatively affect economic growth of nations. Most of these literatures focused on European countries which experienced the transition from the centrally-planned economy (economic decisions are made by the state or government) to the market economy (economic decisions are made by interaction between consumers and businesses) (Boyarchuk 2005; PELINESCU, 2013).

Our study is a country study which focuses on Cameroon which has the highest trade links with other Central African Economic and Monetary Community (CEMAC) countries, and accounts for nearly 40% of the GDP of CEMAC, and whose member countries have a common trade policy based on a common external tariff (AfBD, 2012). The Cameroonian economy is mainly based on oil production and agricultural sector (timber, banana, cocoa, coffee, cotton and rubber) sectors which account for 50% and 25% of exports, respectively (AfBD, 2012).

However, its public expenditure management system is found to have low absorption capacity, low execution of externally–funded public investments and accumulation of public expenditure arrears. The business environment is still not conducive to a robust and booming economic activity. The "Doing Business 2009 report ranks Cameroon 169th out of 181 economies in terms of the overall ease of doing business, and 32nd of the sub-Saharan African 46 countries (AfBD, 2012). And PEFA 2012 report found that there is no integrity of the spending chain in Cameroon and gave Cameroon score "D" which is the worst PEFA score.

1.2 Statement of problem

A large flow of arrears may disguise the true size of the government deficit, significantly reduce the impact of fiscal policy on aggregate demand, and potentially undermine macroeconomic stability (Flynn et al. 2014).

The accumulation of expenditure arrears by governments can have a serious negative effect on the domestic economic growth, reduce the impact of fiscal policy on aggregate demand, and finally undermine macroeconomic stability (Flynn et al. 2014, Chu et al. 1991). Cameroon performed satisfactorily with a sustainable growth and low inflation in Sab-Saharan Africa as oil production increased rapidly in the late 1970s and early 1980s.

Thereafter, Cameroon's government spending expanded to levels that were difficult to scale back once oil revenue started to decline (IMF country report, 2007).

Sine then, the country accumulated a large amount of domestic debt and arrears accompanied by confiscation risks and, potentially the unsustainably and unfavorable political context at the time (Emini et al 2004).

A part from central government, Cameroon's government owned companies pose a serious drain on the budget as well as being regarded as channels for abuse of public Funds and are at the roots of fiscal management difficulties (World Bank, 2006).

Along the period form 1980s to 1990s, Cameroon was considered as a lost one, where the country recorded negative growth rates over most of the period, and witnessed a significant deterioration of investment level and a living standards and general increase of poverty (Emini et al 2004).

The objective of our study is to analyze the dynamic impact of public expenditure arrears accumulation on Cameroon's economy, especially on private sector through the following question:

✓ Does the accumulation of public expenditure arrears have negative effects on macro and micro economy in Cameroon?

2. LITERATURE REVIEW

Several economic theories and literature explain how lack of effective management of public funds can affect the county's economic growth and show how using public money wisely can act as a catalyst in boosting economic growth by increasing both welfare and development state of a nation (Wiseman 1967, Musgrave, 1969 and Rostow, 1971, Wagner, 1983).

Effective public spending can improve the economy when government spending meets its available revenues, otherwise, the government becomes unable to honor its financial obligations and consequently, accumulate the payment arrears with the economy suffering in the process. This section presents relevant literature on public expenditure arrears - its channels, measurement and also its consequences.

2.1 Conceptual framework

2.1.1. Definition of key concepts related to public Expenditures arrears

- ➤ Government budget: a document presenting the government's proposed revenues and spending for a financial year
- ➤ Government revenue: most of the government revenues come from the individual income tax, the payroll taxes, the corporate income tax and partners
- > Public expenditures: the total amount of money the government spends in a particular period
- Arrears: amount of money that should have been paid which has not been paid at due date.
- Public investment: the money that a government spends on public services, such as education and health
- Private investment: the purchase of a capital asset that is expected to produce income, appreciate in value, or both generate income and appreciate in value and generate a profit, i.e. land, buildings, machinery, equipment
- ▶ Public expenditure arrears are any financial obligation that any level of the public sector incurs for which payments have not been made by the due date (Momigliano et al, 2015, p.254, Flynn et al. 2014). The value of expenditure arrears constitutes the amount of the original overdue payment, as well as any interest or financial penalties that the government might accrue (and not pay)

2.1.2 Causes and Channels of public expenditure arrears

The precise point at which a government liability falls into arrears typically varies depending on the country as the time length for unpaid financial differ from country to country.

But also, the type of expenditure (example: remuneration to be paid to individuals or transfers to households in the form of wages, pensions and social benefits, or payment to suppliers, or consumption of public utilities, or mandatory transfers to statutory funds such as social security funds or subnational governments, or tax refunds owed to taxpayers, or payment of interest or principal on government debt or other liabilities among others) (Flynn et al., 2014).

Generally, the public expenditure arrears accumulation can be described as a signal of the absence of political willingness to deal with this issue as the result of failures at any or all stages of the PFM cycle, including inadequate legal frameworks, unrealistic budgeting, weak or cumbersome expenditure controls, inefficient cash management, lack of or problems with a financial management information system (FMIS), or gaps in fiscal reporting (Anderson, 2014, Flynn et al., 2014; Boyarchuk, 2005, Flynn et al., 2014, Ramos, 1998, Fall et al., 2010, Chiades, 2015; PELINESCU, 2013).

2.1.3. Main effects of arrears

The reduction of the level output resulting from the accumulation of public expenditure arrears affects the private sector through various channels such as reduction of profitability (changing the present discounted value of payments), reduction of the level of competition (small and medium enterprises are liquidity-constrained and are crowded out or go into bankruptcy), increasing of cost of capital and future prices of goods and services (suppliers include the uncertainty into offers inflation) (Fall et al. 2010, Connell 2014 and Westphal et al. 2015).

Therefore, the aggregate demand and aggregate supply decline because agents decide to reduce their consumption and match it with their wealth (Boyarchuk 2005, Flynn et al. 2014 and Ramos, 1998).

Consequently, the reduction of demand and supply reduce the level of national output and the level of economic activity hence there is a reduced income available for absorbing the production or investing felt into arrears (Fall et al. 2010, Chiades 2015).

✓ Micro effects

The accumulation of public expenditure arrears has many distortionary effects on microeconomic level and vulnerable sectors, such as remunerations of low-income workers, pensions, social benefits and small and medium enterprises (SMEs).

First of all, public arrears affect entrepreneurship behavior: delays of expected payments affect investment choices and their returns. Hence, the agent prefers the short term and low risk rather than long run and high risk and structural investments.

Second of all, public arrears affect business cash flows: the accumulation of public expenditure delays and arrears has a hostile effect on cash flows of suppliers in the private sector. The accumulation of stock of arrears in commercial transactions by the public administration to private entities have detrimental effects on the business environment by worsening the burden of already financially constrained firms which can ultimately be pushed them out of business. It increases the likelihood to default which forces the banks to increase interest rates for their credit holders which in turn increases the chance of bankruptcies and reduced profits for the private suppliers (Westphal et al. 2015, Connell, 2014);

Similarly, uncertainty about future resource flows also increases the risk of default for private suppliers who are financial constrained (Flynn et al. 2014, CHIADES et al. 2015, and Westphal et al. 2015)

Likewise, an increase of stock of arrears affects an individual's consumption-saving decisions, lessens the level of disposable income but also individual household or firm wealth by reducing the resources which are in their disposition for use;

Last of all, public arrears have negative effect on remuneration, pension and social transfer arrears on an individual's consumption-saving behavior lead to a reduction in expected income from both capital and labor, so that agents lower their consumption and income decreases due to

the precautionary savings. Additionally, the effects on labor income are the depreciation of wage arrears and variation in the amount of resources available to agents in each period, which brings consumption-saving fluctuations (Boyarchuk et al. 2005);

✓ Macroeconomic consequences

The various macroeconomic effects of public expenditure arrears include:

Firstly, it reduces economic growth if public arrears imply a liquidity problem in the economy which can have a detrimental impact on aggregate demand. If businesses are dependent on government contracts, it can cease or delay their activities as a result of payment delays or impose difficulties in accessing credit from commercial banks, resulting in a reduced pace of economic activity and increased unemployment (Flynn et al., 2014).

Secondly, the increase of public arrears accumulation reduces the size of available resources and causes the volatility in terms of consumptions, saving and investments. This fluctuation of main aggregate of GDP make the level of income per capita more volatile and increase inequality hence uncertainty on the settlement of invoices push to monopolistic competition as only large suppliers with adequate financial capacity work with government facing the issue of arrears accumulation (Flynn et al., 2014).

Thirdly, it increases cost of service provision where government suppliers try to mitigate the risks and opportunity cost of delayed payments by adjusting their initial prices upward. This reduces the efficiency of government expenditure and contributes to economy-wide inflation (Flynn et al., 2014),

Fourthly, it reduces or interrupts public service provision where governments with limited resources can be forced to reduce the amount of supplies to be purchased or the volume of service to be provided as the cost of supplies rise to cover the cost of arrears. Suppliers themselves may require that government pay for goods and services in advance, that quantities supplied be limited, or that delivery of further supplies or services be made dependent on the payment of outstanding amounts. The delivery of public services may be halted entirely if suppliers cease supplying essential services (such as electricity, water, medicine, or fuel) or stop or delay the construction of investment projects (Flynn et al., 2014);

Fifthly, it increases rent-seeking where accumulation of arrears also increases the incentives for rent-seeking and collusion between government and suppliers, as the latter seek to accelerate payment or circumvent expenditure control procedures (Flynn et al., 2014),

Sixthly, it increases interest rates where illiquid suppliers may try to bridge the stock of arrears by borrowing from banks, adding pressure to credit markets, and driving up interest rates. These pressures, in turn, may induce the central bank to relax monetary policy, further driving up the domestic price level (Flynn et al., 2014);

Seven of all, it reduces confidence in fiscal policy where public expenditure arrears can disguise the true size of the government's liabilities by as much as 20 percent of GDP. The stocks of arrears distort the planned implementation of the budget notably due to the costs of punitive late-payment penalties and additional interest charges, and demands to divert funds from planned activities to settle the arrears (Flynn et al., 2014)

And finally, increases in second-round fiscal costs where governments suppliers who suffer from liquidity shortages, lower profits, reduced employment, and falling confidence in government, they may be inclined to reduce or withhold payment of taxes and social security contributions until, in turn, they receive payments due to them from government (Flynn et al., 2014).

2.2 Empirical evidences

2.2.1 Measurement indicators

The IMF/Government Finance Statistics Manual explain that the arrears can occur only when financial obligations are not made after a specified period for payment. To be able to measure the public expenditure arrears, one can calculate the difference between commitments and payment orders periods. The difference between issuing payment orders and actual payments (accounts payable) can indicate necessarily the payments arrears (Checherita, 2015; Flynn et al., 2014).

The identification and the measurement indicator of the public expenditure arrears is based on "time" which determines the duration of overdue financial obligations that the government failed to honor on due date. Therefore, the increasing structural imbalance between budgeted revenues

and actual expenditures can be measured by the excess time over the normal time fixed by the legal requirements (Checherita, 2015). Therefore, the amounts which are not paid are arrears.

Depending on the public accounting system in place, there could be data on spending commitments, payment orders and actual payments (cheque or transfer) states.

Figure 3: examples of legal payment period according to country

Payment Period	Country
30 days	Afghanistan, Australia, Botswana, Brazil, Dominican Republic, Ethiopia, EU member countries, Grenada, Jamaica, Kosovo, Malawi, Moldova, Seychelles, South Africa, Trinidad and Tobago, Tunisia, Vanuatu
45 days	Costa Rica, Haiti, Lesotho
60 days	Cape Verde, Central African Republic, Guatemala, São Tomé and Principe
90 days	Angola, Benin, Burkina Faso, Cambodia, Ghana, Mali, Mauritania, Morocco, Philippines, Portugal, Senegal
120 days	Niger
Not defined	Albania, Armenia, Bangladesh, Bolivia, Burundi, Cook Islands, Côte d'Ivoire, El Salvador, Gabon, Georgia, Guinea Bissau, Honduras, India, Lao People's Democratic Republic, Macedonia, former Yugoslav Republic of Macedonia, Madagascar, Mauritius, Mozambique Myanmar, Nepal, Peru, Republic of Congo, Samoa, Republic of Serbia, Sierra Leone, South Sudan, Sudan, Swaziland, Tajikistan, Timor Leste, Tonga, Uganda, Ukraine, and Yemen

Source: Flynn et al., 2014).

For Cameroon, in line with the Central African Economic and Monetary Community (CAEMC) directive, unpaid financial obligation is considered to be arrears "restes à payer" after the 90th day after issuing payment order (IMF, 2010).

PEFA Measurement Indicator

The Public Expenditure and Financial Accountability (PEFA) provided a set of high level indicators which can measure and monitor performance of Public financial management system, implementation process and applied institutions. These indicators include one to measure and monitor public expenditure arrears (PEFA, 2005). The PEFA measurement indicator for payment arrears determine the extent to which there is a stock of arrears and the extent to which the systematic issue is being brought under control and being addressed (PEFA, 2005). This indicator of the ratio "stock of expenditure payment arrears as a percentage of actual total

expenditure for the corresponding fiscal year and any recent change in the stock", but the ratio excludes payments and transfers between public entities (PEFA, 2005 and 2016).

The public expenditure payment arrears PEFA measurement indicator contains two dimensions which are stock of expenditure arrears and expenditure arrears monitoring (PEFA, 2016). The first dimension evaluates the extent to which there is a stock of arrears, which can be identified at the end of the fiscal year and precise extensive delays in payment of those financial obligations and compared to the total expenditure for the same fiscal year. Whereas the second dimension evaluates the extent to which any expenditure arrears are identified and monitored focusing on which aspects of arrears are monitored and how frequently and quickly the information is generated (PEFA, 2016). The figure below shows the PEFA measurement indicator.

Figure 4: Measurement of public expenditure arrears

Score	Minimum requirements for scores
22.1. Sto	ck of expenditure arrears
A	The stock of expenditure arrears is no more than 2% of total expenditure in at least two of the last three completed fiscal years.
В	The stock of expenditure arrears is no more than 6% of total expenditure in at least two of the last three completed fiscal years.
С	The stock of expenditure arrears is no more than 10% of total expenditure in at least two of the last three completed fiscal years.
D	Performance is less than required for a C score.
22.2. Exp	enditure arrears monitoring
A	Data on the stock, age, and composition of expenditure arrears is generated quarterly within four weeks of the end of each quarter.
В	Data on the stock and composition of expenditure arrears is generated quarterly within eight weeks of the end of each quarter.
C	Data on the stock and composition of expenditure arrears is generated annually at the end of each fiscal year.
D	Performance is less than required for a C score.

PEFA, 2016

Based on these payment arrears measurement indicators mentioned above, it may not be easy to identify arrears as they are or found more accurate and specific data since some governments may avoid recognizing them as overdue payments. To capture the arrears payments, one can use

accounts payable as a share of total government payment delays or stock of arrears depending on the recognized datasets such Eurostat's Sector Accounts data and African Development Bank data.

2.2.2 Methodological framework

To be able to track the public expenditure arrears, the commonly used measurement indicator in earlier literatures is the calculation of the time duration from the payment orders issuing to cheques cashing. The PEFA expenditure arrears measurement indicator is determined by the calculation of the ratio stock of expenditure payment arrears as a percentage of actual total expenditure for the corresponding fiscal year and any recent change in the stock, but this ratio excludes payments and transfers between public entities (PEFA, 2005 and 2016).

After calculation of indicator, the higher the ratio is, the worse the effect is. A high level of ratio can interpret inadequate commitment controls, cash rationing, lack of information, inadequate budgeting for contracts, and under-budgeting of some items or poor planning system (PEFA, 2005 and 2016).

In fact, public expenditure arrears can affect resources allocation, since they can be captured by the government in the next fiscal planning and or, the private agents through prices setting and budget planning. However, the significance of the public payment arrears depends on the ways in which the arrears are expected and the financial solvency (budget constraints) for the economic agents. The constant payment arrears accumulation can mean weak PFM system and incapacity of the government to conduct budget implementation control.

This phenomenon prevents the private sector to achieve their financial objective, and the private sector is forced to reduce business activities (business investment) or decrease taxes to meet the financial capacity "income adjustment". To detect the effect public expenditure arrears in short run, one has to assess the variation of fiscal deficits. If the variation is growing negatively, it means the expected tax revenues have not been being fully received as expected which means that the private sector could have reduced the amount of taxes to be paid because the economic activities declined. When you analyze the composition of the government budget plan, and the way in which this budget is implemented over a certain period, one is in a better position to properly assess how public authorities cope with the issue of arrears and fiscal deficit.

If the payment arrears persist, they affect the economy of a country through increase of prices and discourage the business activities. When the private sector expects payment arrears to be high and last for the period relatively long, the suppliers increase the prices at the market "prices adjustment". This prices adjustment helps them to cope with the risk of insolvency and illiquidity and afford different financial transactions.

Then, to detect the effects of payment arrears, we have to evaluate the level of investment and consumption spending for the public and the private sectors.

2.2.3. Country experiences

Different countries around the world such as Russia, Argentina, Zambia and many others experienced the issue of payment arrears accumulation. These arrears implied government arrears on payment for services rendered, good supplied, legally mandated unilateral transfers like pensions and other allowances.

In European area, in Romania, the government liquidity crisis of the period after 1989 caused the accumulation of arrears which contributed to the increase of the arrears to social security funds, unemployment funds, wage arrears, dividends, from less than 4% of GDP in 1995 to more than 10% in 2000 (PELINESCU, 2013). In Russia, for the year 1997-2000, public expenditure arrears have risen from different sources such as fiscal indiscipline in powerful ministries, entering into commitments that exceed their approved budget allocations, commitments made within budget allocations but below commitment levels set by the Budget Policy, and so forth (Diamond, 2000). In Moldova during the period 1996/1997 the arrears in pensions amounted to 4.6% of GDP and overall arrears were 11% of GDP. The government of Moldova undertook an in-kind operation to pay arrears to pensioners by setting up a network of shops operated by the ministry of labor and social protection where every pensioner received talon specifying the amount of cumulative debts owed to him from local post office or savings bank branch (Ramos, 1998).

In Latin America, the Argentinian government during the late 1980s and 1990s through the social security system experienced a huge accumulation of arrears to suppliers and pensioners up to 5% of GDP due to a very high inflation. To lessen the problem, the government issued bonds which smoothed phasing in payments of the unfunded pension liability (Ramos, 1998). In

Venezuela, the public arrears amounted to 10% of GDP in 1997. These arrears combine unemployment protection and retirement savings (Ramos, 1998).

In Africa, in the 1990s, Zambia experienced accumulated public expenditure arrears due to inability to monitor and control the effectiveness of public budget implementation procedures including adequate accounting and reporting requirements (Chu 1991). Tanzania also faced the problem of accumulation of public expenditure arrears where in 2015 due to weak monitoring and control of PFM and, it increased up to 2.3% of GDP and was due to the distortion of implementation of planned budget (Anderson et al. 2014). In Senegal in the period 1993-2009, the government expenditure arrears increased dramatically up to the average of 4.7% of all public expenses due to weak implementation of PFM and large amount of credits provided to private enterprises followed by incapacity to repay (FALL et al. 2010). In 2009, Ghana had experienced the difficulties of the huge public expenditure arrears which rose up to 8.4% of the GDP.

The arrears accumulation became a big challenge for Ghanaian economic activity from 2008 when the government implemented expansionary policy to finance election and increased capital expenditure. The increased spending left the Ghanaian government unable to honor its financial obligations. Then, the banks provided huge amount of loans to the public companies which became insolvent and defaulted. The high rate of non-performing loans left banks unable to provide new loans (Cobbinah, 2011; Anderson et al. 2014).

The empirical papers used different methodologies to evaluate the effect of public expenditure arrears on macroeconomic and microeconomic level. The next section discusses the methodology used to discuss those consequences.

2.2.4. Quantitative analysis: methodology used and results

The assessment of the public expenditure arrears impact on various dimensions from government credibility to economic recession, scientific researches use different methodologies depending on objective of the study. To study the impact of public expenditure arrears on the welfare loss and other distortionary effects associated with them, one can use intertemporal consumption by taking into account utility maximization to make decisions between consumption today "C1" and

consumption tomorrow "C2", endowed with financial resources "Y1" today and "Y2" tomorrow and the tax "T1" today and "T2" tomorrow (Ramos, 1998).

Assuming G and T to be government expenditure and tax revenue respectively and fixed; the utility maximization over consumption in both periods, the equation is defined as follows. Max U (C1) + β U (C2) (1) s.t C1 \leq Y1-T1+ β & C2 \leq Y2-T2-(1+r) β where β < 1 and represent the amount of borrowing in one period (Ramos, 1998).

Combining the two constraints, $C1 + \frac{C2}{1+r} \le Y1 - T1 + \frac{Y2 - T2}{1+r}$ (2), similarly for the government $G1 + \frac{G2}{1+r} \le T1 + \frac{T2}{1+r}$ (3). Then they combined (2) and (3) and constructed the next equation, $C1 + G1 \frac{C2 + G2}{1-r} \le Y1 + \frac{Y2}{1+r}$, taking into account first order necessary and sufficient conditions the simple consumer problem, the intertemporal optimal condition became U' (C1) = β (1+r) U' (C2) where U' (.) represent the first derivative of the utility function. And the optimal quantity are given by C*1=C*2.

For more clarification, let's use two cases about agents' perception of the government behavior:

- ✓ Case I represents agents whose payments are in arrears and know with certainty the amount to be paid in the future; since they are budget constrained, their consumption can be much more volatile, hence, they cannot apply for a loan without collateral. The financial institutions can be very reluctant to lend to them without knowing the amount of arrears the government owes them and when they can be paid (Ramos, 1998).
- ✓ Case II represents the creditors for the state, when the government failed to honor its
 financial obligations; those creditors can experience real losses which mean that when the
 amount to be paid become arrears, their real value can decline and decrease creditors
 profitability overtime (Ramos, 1998).

Through these two cases, securitization may be one of the many ways that can be used to cope with the effects of public expenditure arrears accumulation in short run (Ramos, 1998).

In 2010, the empirical study carried out with the aim of assessing the effects of government payments arrears in Senegal. To determine the extent to which there were payment arrears, the

accounting and economic approach which measure the annual flow of payment arrears found the existence of high level of payment arrears (FALL, 2010). This method analyzed the variation between public spending and public revenues, and found that there was a significant and growing fiscal deficit in the period under study. Then, to evaluate effects of those public payment arrears in Senegal, a dynamic stochastic general equilibrium model was taken into account and payment arrears were considered as a "unilateral borrowing" of the Government implying a levy on firms' returns (FALL, 2010). Then, the calculation of correlation between payment arrears and main macroeconomic variables (consumption, investment and production) showed the negative and significant relationship between payment arrears and those variables. Again, calculation of correlation between payment arrears and economic sectors (Industries, balance of payments, trade and, services) showed a negative and significant relationship between arrears and those components. The overall results showed that payment arrears increased labor and consumption taxes, and worsen the economic vulnerability (FALL, 2010).

The assessment of the effects of government arrears on private sector for European Union countries have been conducted by taking into account two complementary methods, which were the annual panel data and Bayesian VARs where the data were collected from Eurostat's Sector Accounts data on account payable (ESA-1995 code AF.7). If a payment is not made on time, it becomes an arrear or a delay within permissible payment terms; then, it shows up under the category "other accounts payable" (AF.7) in the national accounts (Westphal, 2015). To measure the existence of payment arrears the computation of the AF.7-to-GDP ratios during the period under study has been conducted.

The calculation showed that several European countries e.g., Finland, Denmark, Sweden and Bulgaria tended to have relatively large AF.7-to-GDP ratios, but also the highest ratios found in Greece and Spain (Westphal, 2015). To determine the impacts of public payment arrears, the analysis were done by determining possible correlation between loans to private ratio by GDP, public spending to GDP ratio, saving to GDP ratio, output gap and unemployment rate, labor force growth rate, initial level of GDP per capita (Westphal, 2015). For both methodologies, the results showed that the payment delays and arrears to some extent estimated arrears lead to a higher likelihood of bankruptcy, lower profits, and lower economic growth (Westphal, 2015).

For Tanzania's economy, the essence and the extent to which there were public payment arrears have been measured using PEFA measurement indicator "Stock of expenditure payment arrears as a percentage of actual total expenditure for the corresponding fiscal year and any recent change in the stock" (Anderson, 2014). The objective of the study was to assess the causes of arrears in Tanzania. The secondary data were collected from monitoring of arrears reports by the Accountant General's Department (AGD) and other key actors and institutions. After the assessment, absence of clear definition of payment arrears and, weakness in PFM system found to be the main source of payment arrears (Anderson, 2014). The results showed that the common reason of payment arrears was inadequate budget provision through the weakness of medium term budget framework process, weakness of contract management and delay in release of budget which caused the arrears to grow from 1.4% to 2.3% of GDP from 2010 to 2014.

2.3. Conclusion:

The existence of public arrears were found through the ratio arrears to total government expenditure for some empirical literatures while others used ratio arrears to GDP. The results were quiet the same. The higher ratio meant the higher amount of payment arrears and the higher impacts on economy. The impacts of payment arrears on economic growth and private sector were captured through assessing the correlation and possible effects of arrears on real GDP growth and on profitability (the economy-wide gross operating surplus, and the degree of liquidity as proxied by the probability of default). The results found the weakness of PFM and monitoring and control of arrears to be the main source of payment arrears and showed that payment arrears appear to reduce profits for private sector and economic growth.

3. Case study: Macroeconomic analysis of arrears in Cameroon

In our study, we were constrained by the lack of reliable datasets, scarcity of data together with the limited time. In addition, since 1997, it has been difficult to establish accurate data on the outstanding stock of internal debt despite multiple audits to establish it (World Bank 2006).

3.1. Country background

The Republic of Cameroon is located along the coastline of 402 kilometers to the Gulf of Guinea. In the North West, it borders with Nigeria, in the north east with Chad, in the east with the Central African Republic, in the south with Congo Republic, Gabon, and Equatorial Guinea,

and finally with the Atlantic Ocean to the west (AfDBD, 2010). The country's surface area is 475,000 square kilometers and populated by more than 22.8 million (AfDBD, 2010). Cameroon's economic growth is fueled by natural resources especially oil, timber, and crops such as coffee, cotton, and cocoa, natural gas, bauxite, diamonds, gold, iron, and cobalt (World Bank, 2016).

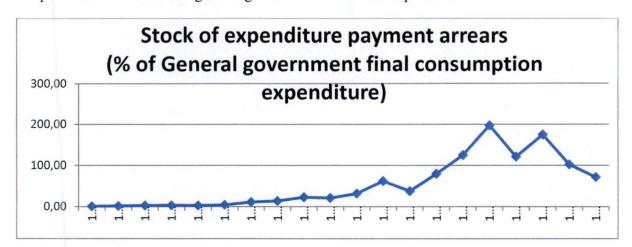
However, the Cameroonian economy exhibited a number of structural features and distortions in the 1980s and most of the 1990s. The country experienced a decreasing investment, and growing public deficits. The budget deficits of 1980s followed by a 40% fall in per capita consumption between 1985/1986 and 1992/1993. The gross domestic investment, which accounted for over 27% of GDP in 1981, fell to less than 14% in 1992, representing about 50% decline (Elangwe 2012 and Emini et al 2004). On 12 January 1994, the government of Cameroon decided to devaluate the CFA franc with the aim of promoting exports and reducing imports, and the government started massive public investment program in partnership with the private sector (IMF, 2014).

Notwithstanding, the positive trend in the post-devaluation growth period of the late 1990s, gross investment remained significantly below the pre-crisis levels till in 2001 (Emini et al 2004). And the weak PFM system can be the main source of accumulation of payment arrears.

3.1.1 Indication of public expenditure arrears in Cameroon

In Cameroon, the arrears have been accumulated progressively from 1980. This graph shows that the stock of public expenditure payment arrears as a percentage of general government final consumption expenditure at the corresponding fiscal year from increased continuously from 1980 at 0.78% up to 197.14% in 1995.

Based on PEFA indicator, we see that from 1986 the ratio stock of arrears to general government final consumption expenditure exceeded 10%, which means the existence of significant arrears in Cameroon during the period under study. This rate places the country at last score "D". The score D is the worst score, and it means that the public expenditure arrears were extremely accumulated.



Graph 1: Stock of arrears to general government final consumption ratio

Source: Own calculation by the data from AFDB Socio Economic Database, 1960-2016

In the following section, we will try to assess the effects associated to this score on private sector activities and on economic growth.

3.2. Main Causes and Channels of public expenditure arrears in Cameroon

3.2.1. PFM framework

Public Financial Management (PFM) ordinarily refers to the management of government revenue, expenditure and cash. The PFM practices can be examined through nine dimensions which are PFM governance, budget planning, budget execution, treasury operations and cash management, procurement, accounting and financial reporting, internal and external audit, financial management information systems, and HR (Deloitte Consulting, 2014).

For Cameroon, the country exhibits a presidential system of government and a highly centralized budgetary system (World Bank 2006 and Elangwe 2012). With the collapse of public services in the mid-1980s, the control and enforcement institutions was initiated in 1985 to address a massive decline in the terms of trade which led to severe fiscal contraction and left footprints on institutions, such as, scarce public resources that lead to the abandonment of all pretentions of a formal budget process (Elangwe 2012 and World Bank 2010).

The efforts made by the legislature or parliament to control public budgeting have been greatly undermined (as often budgetary decisions-making is solely a function of the executive and/or the

President). In addition, the low level of public spending compounded by poor composition and ineffective public finance management (PFM) may be caused by lack of resources (technical and financial), especially the general incapacity within the legislature, continuous fiscal mishaps, marked corruption and misappropriation (Gauthier, 2009; Elangwe 2012 and World Bank, 2006 and 2016).

Often the government took different steps to modernize PFM, to improve governance, to help in public and private investment improvement, and to foster a growth-friendly environment, but all measures taken have been ineffective; maybe because the key sectors to boost development have been left behind (Elangwe, 2012); mainly, public finance management, delays in implementing public enterprise reforms, unreliable energy, transport and telecommunications infrastructure, underfunded public services in the health and agriculture sectors, and lack of credit for small and medium enterprises (Elangwe, 2012).

However, due to the donor's conditionality and technical support, Cameroon took significant steps in improving its governance of public finance in recent decades. But unfortunately, the legal framework in relation to decentralization is overlapping, cumbersome and contradictory in many respects, absence of clear processes and accountability mechanism (Elangwe 2012, World Bank 2011 and 2016).

3.2.2. TERMS OF TRADE

With the discovery of offshore oil in 1975, the economic growth accelerated and highly dominated by the exports of oil and agricultural products. The GDP growth rate shifted from 17% to 28% in the period 1977/1986 (Nkogko, 2002). The total government spending grew proportionally with the government revenues which kept the fiscal balance stable. Therefore, the government started big investment programs with transports infrastructure projects. A big number of public agencies and public enterprises were created, and the government provided subsidies (Nkogko, 2002).

This huge spending dominated by construction works declined because of the collapse in oil prices and the country's oil production, followed by a decline of the prices in the world market of agricultural products, (especially, coffee, cacao and cotton), an appreciation of exchange rate and

the rise in the relative price of nontraded to traded goods (Nkogko, 2002). Consequently, the country's external outstanding debt rose to about 49% of GDP during 1987-93 and some local banks which provided excessive loans to the defaulted companies run out of liquidity (Nkogko, 2002). The country became unable to honor its financial obligation even the wage bills, which conducted to currency devaluation in 1994. During this tough period, the fiscal deficit was financed by external borrowings and an accumulation of domestic and external debt.

The negative external shock caused the fiscal crisis and aggravated by economic mismanagement. The weak public finance management (PFM) system and the lack of a good governance framework could have contributed to the building up of arrears (IMF 2010, World Bank 2016 and Elangwe 2012). The budget cycles of the local and central governments were often the allocated resources which did not materialize for several months and budget expenditure were occasionally executed without the observance of normal procedures (IMF 2010, Elangwe 2012, and World Bank 2011).

3.2.3. Responses to economic recession

The accumulation of sizable amount of arrears to private suppliers by the government is believed to have compounded and exacerbated the massive accumulation of nonperforming loans in the banking sector though a wide range of economic reforms which were initiated in the late 1990s, notably in the area of banking and finance, public expenditure management and debt, macroeconomic stability remains at the core of the government's policy agenda (Emini et al 2004).

To deal with the issue of economic recession and public expenditure arrears, the republic of Cameroon, undertook a series of reform with the objective of reducing the fiscal deficit through increase in tax rates, cuts in the wage bill and public enterprise subsidies, as well as reducing domestic costs and restructuring public enterprises where by the end of 1993, wage of civil servants were reduced by 32% whereas between 1992 to December 1995, wages for senior civil servants in real terms fell by 75-80% (Nkogko, 2002).

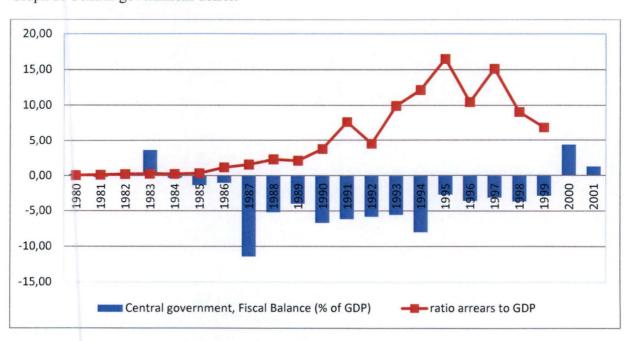
With the 1994 currency devaluation, the government of Cameroon implemented some structural reforms related to the reorganization and downsizing of the civil service, privatization of public

enterprises, bank restructuring, and the liberalization of domestic prices and interest rates (Nkogko, 2002)

3.3 Effects of Cameroon's public expenditure arrears

The ratio arrears to general public expenditure showed the existence of high level of payment arrears in Cameroon under the period of study. In 1985-1987, Cameroon experienced high decrease of export revenues due to the continuous decline of the prices of its main export products, especially oil, coffee, cocoa and cotton in the world market (AfBD, 2004) and, it seemed impossible for Cameroon to scale back public spending to lower level which weakened management performance. This situation worsened Cameroonian fiscal deficit from that time.

The graph below shows that the level of budget deficit worsened for Cameroon from 1985 to 1997. This means that during that period public revenues was far less than the level of spending. Since 1998 it started to recover and reached the decision point of HIPC initiative in 1999 (IMF, 2006)



Graph 2: Central government deficit

Source: AFDB Socio Economic Database, 1960-2016

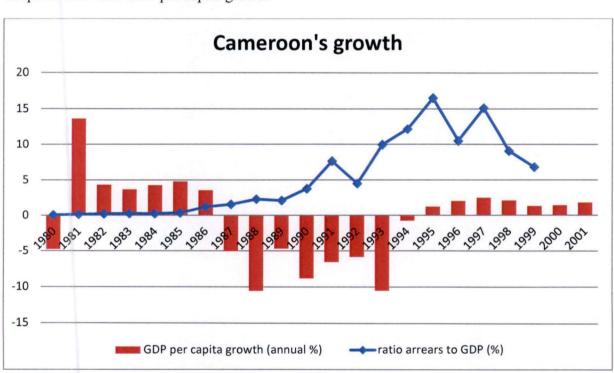
The graph above showed that as fiscal budget imbalances increased, the ratio public expenditure arrears to GDP increased overtime, also. To assess the consequences of the situation showed in

the graph above, not only we try to analyze the link between arrears accumulation and other macroeconomic and microeconomic components, but also we try to assess the possible mechanism behind.

3.3.1. Macroeconomic impact of arrears in Cameroon

The economic recession for Cameroon started in 1985 with its export income resulting from the fall of the prices of its main exports products in the world market (IMF, 2006). Also, in the same period, GDP per capita declined constantly, which means the decline of economic activities for both public and private sector.

Maybe, this economic recession can be due to increase of fiscal imbalances resulting from grow of public spending more than its public revenues and which increased the public payment arrears. The negative GDP per capita growth was significant from 1987 to 1993 but, since 1994, the GDP per capita recovered little by little but it has never met the level of the period of before 1984.



Graph 3: GDP and GDP per capita growth

Source: World Development Indicators, World Bank 2017

The above graph showed that since 1985, Cameroon has been worsening into deep economic recession. In 1987 and 1993 the GDP per capita grew at more than -10% while the ratio arrear to GDP increased sharply and exceeded 16% of GDP in 1996. However, after the currency devaluation of 1994, the economic growth the GDP per capita growth recovered more and more whereas in 1997, the ratio of arrears to GDP declined.

3.3.2. Impact of arrears accumulation on private sector in Cameroon

The impact of public expenditure arrears accumulation on private sector can be assessed through private investments and banking activities. Investment and the use of banking system can determine the weight of private sector in the economy.

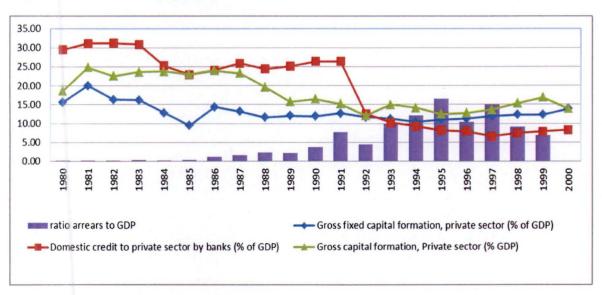


Figure 4: Private Sector's participation

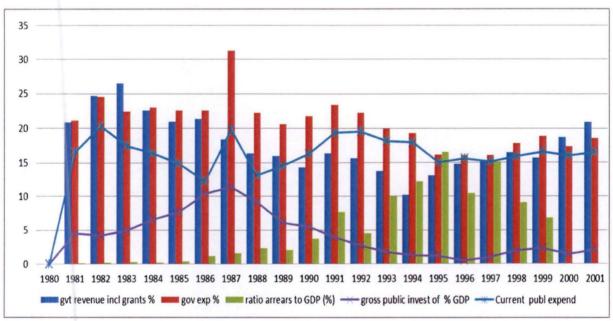
Source: World Development Indicators

The graph above showed that the ratios gross fixed capital formation, domestic credit to private sector and gross capital formation-private sector to GDP for Cameroon's private sector investments declined gradually from 1986 and worsened in 1992 to 1997. In the same period, the ratios declined, too. These trends can explain the decrease of economic activity for private sector which can be one of the main causes of unemployment, output and the tax compliance throughout productions lessening or going bankrupt and crowding out for different economic agents.

From 1980 to 1991, Cameroonian banks provided loans to different private borrowers where the domestic credits to private sector were above 20% of GDP, whereas after that period, the credit ratio to GDP declined to around 10% of GDP and below. The banks provided loans to the point where those debtors who were unable to repay loans since the state owed them payment arrears, which made them insolvent and defaulted. Unfortunately, for Cameroon, we didn't find the data related to non-performing loans in order to determine the extent to which the debtors defaulted and what caused the banks to cut the level of loans provision in 1992, as it can be observed on the graph above. The large amount of loans provided seemed to be one of the causes of reduction of the level participation of banking system since 1992. In the same year, gross fixed capital formation, credits to private sector and gross capital formation had about 12% of GDP. This private disinvestment can be taken as signal of decline of private sector profitability.

3.3.3. Impact of arrears accumulation on public sector in Cameroon

Graph 4: Public revenues, expenditure and investment



Source: Emini et al, 2004 and AFDB Socio Economic Database, 1960-2016

The graph above showed that in 1982, the public current expenditure started to decline while the public investment rose. In 1983, government revenues became lower than government spending. The fiscal imbalances worsened in 1987. In that period there were a significant gap between

revenues and expenditure. The expenditure increased about 31% of GDP whereas revenues increased about 19% of GDP, and payment arrears increased about 1.5% of GDP in the same year. To cope with these fiscal imbalances, the republic of Cameroon reduced gradually its investment spending level since 1987, as the graph above showed. But, the ratio arrears to GDP continued to increase constantly. In the graph above, since 1995, the spending and revenues have been adjusted progressively, and 2000 the revenues were higher than expenditure growth rate. However, public investment fluctuated between 0.5% and 2.5% of GDP after 1994, which is very low compared to the period of 1980s.

4 Conclusion and suggestion

The public expenditure arrears accumulation is a symptom of public finance management weakness and has distortion effects on economic growth and on private sector dynamism in particular. This study had objective of assessing the impact of public expenditure arrears accumulation on Cameroon's economic growth, effect on private sector in particular during the period from 1980 to 2000.

We used the ratio Stock of expenditure payment arrears to general final consumption expenditure to assess the existence of payments arrears in Cameroon. We evaluated the variation of public investment, revenue and spending, GDP per capita growth, fiscal deficit, private gross capital formation, private gross fixed capital formation and the variation of credit to private sector so as to evaluate the potential effects of payment arrears.

The results showed that the Republic of Cameroon accumulated a huge amount of public expenditure arrears since 1986 because the ratio is above 10% and since that time it has never decreased. The worst period was found to be 1997 where this ratio was 197.14%. In this study, we found that the accumulation of public expenditure arrears had negatively and significantly impacted the Cameroon's economy on macroeconomic and microeconomic levels.

On macroeconomic level, we found that the GDP per capita growth rate declined sharply from 1987 to 1993, and exceeded the growth rate of -10% of GDP, in 1993. The public fiscal deficit worsened during the period under study. The fiscal deficit exceeded the growth rate of -11% of GDP, and -8% of GDP in 1987and 1993, respectively. The negative growth rate can to some extent mean that during the period under study, the economic environment in Cameroon

experienced an increased recession. This kind of economic decline can have an increased level of unemployment, inflation, and national output in general.

On microeconomic level, the result showed that the size of private sector activity declined since the gross fixed capital formation, gross capital formation and the size of credits to private sector declined from about 25% of GDP in the 1980s to less than 12% of GDP in the 1990s. This significant reduction of private and banking sectors' business activities can mean disincentive to invest in new projects and this is not conducive to a great business environment. This disinvestment behavior can show that, to some extent, there were private agents who run losses in their businesses and stopped doing their businesses altogether.

We suggest, based on the results above, that the republic of Cameroon continue to conduct various reforms in the public finance management in order to improve the capacity of the staff for better management of available resources, implement decentralization policy and reinforce better control and monitoring system. In addition, the government needs to introduce the Integrated Financial Management Information System (IFMIS) at all level of public service to allow to the Republic of Cameroon to deliver different services electronically and enhance the pace of PFM reforms.

Moreover, the republic of Cameroon has to strengthen the public-private partnership in order to allow economic diversification through skills and assets sharing in delivering a better service as well as facilitating the use of general public assets for common benefits.

Future research directions

Based on the complexity and correlation between economic agents involved in the buildup and dynamics of payment arrears, it is important to conduct further research, using new panel datasets which cover all economic aspects. The analysis could proceed by identifying and modelling the possible interactions between economic agents involved in the process, and explaining all possible factors associated with the mechanism of creating payment arrears. This will allow identifying the interaction and relationship between the economic agents and determining specific causal-effects of payment arrears in short term and long run.

REFERENCES

- AfBD, 2010, *The AfBD and Cameroon, 40 years of partnership.* Tunis-Tunisia: African Development Bank.
- AfDB, 2009, Country strategy paper 2010-2014 Cameroon. African Development Bank Regional Department, Center (ORCE).
- Anderson, G, 2014, Public expenditure review (per) stud on the prevention and management of payment arrears. Washington DC: IMF.
- Bartels, F. L, 2009, Foreign Direct Investment in Sub-Saharan Africa: Determinants and Location Decisions. Vienna: UNIDO.
- Banque Mondiale, 2012, Parachever la réforme des finances publiques pour une meilleure performance de l'action de l'etat plan de modernisation des finances publiques du cameroun revue de mise en oeuvre 2009 2012 actualisation 2013 2015. Washington DC: Banque Mondiale.
- Gauthier B, 2009, Governance and oil revenues in Cameroon, Revenue Watch Project, OxCARRE, Oxford University
- Boyarchuk, D. (2005). The consumption and welfare implications of wage arrears in transition economies. *Journal of Comparative Economics* 33, 540–564.
- Checherita et al., 2015, Governments' payment discipline: the macroeconomic impact of public payment delays and arrears. Frankfurt: European Central Bank,.
- Chiades P, 2015, Fiscal Consolidation and Expenditure Arrears: Evidence from Local Governments' Investments. Venice: Bank of Italy.
- Chu, K.-Y, 1991, Public Expenditure handbook: A guide to public expenditure policy is ues in developing countries. Washinton, DC: IMF.
- Cobbinah, et al, 2011, *Joint review of public expenditure and financial management*, Ministry of Finance and Economic Planning, Ghana
- Connell W, 2014, Economic Impact of Late Payments. Brussels: European Commission.
- Cottarelli et al. 2010, Report on Observance of Standards and Codes (ROSC) Fiscal Transparency Module, Cameroon, IMF, Washington DC

- Elangwe L, 2012, The Political Economy of Budget Process in Cameroon. *The Political Economy of Budget Process in Cameroon*. Institute of Development Studies, United Kingdom.
- FALL A, 2010, *Arriérés de paiement et dynamiques de croissance au Sénégalaise*. Dakar: MINISTERE DE L'ECONOMIE ET DES FINANCES.
- Flynn S, 2014, *Prevention and Management of Government Expenditure Arrears*. Washington, DC: IMF.
- Frank L. Bartels et al., 2009, Foreign Direct Investment in Sub-Saharan Africa: Determinants and Location Decisions. Vienna: UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO).
- Hammami, M, 2006, *Determinants of Public-Private Partnerships in Infrastructure*. Washignton, DC: IMF.
- IMF, 2007, IMF Country Report-Cameroon: Selected Issues. Washington DC: IMF
- IMF, 2014, IMF Country Report-Cameroon: Selected Issues. Washington DC: IMF.
- IMF, 2006, IMF Country Report -Cameroon: Enhanced Heavily Indebted Poor Countries (HIPC) Initiative Completion Point Document and Multilateral Debt Relief Initiative (MDRI), Washington DC: IMF
- Momigliano S, 2015, *Public Finances Today: Lessons Learned and Challenges Ahead.* Roma: Banca d'Italia.
- Nkogko, 2002, International Comparisons of Taxation in Developing Countries, Keio University, Tokyo
- Orav T, 2015, IMF Country Report No. 15/332. Washington, D.C.: IMF.
- PEFA, 2012, Evaluation de la gestion des finances publiques de la communauté urbaine de douala-rapport final pefa sur les performances. Washington, D.C: PEFA.
- Ramos, A. M., 1998, Government Expenditure arrears: securisation and other solutions. Washington, DC: IMF.
- Sikder, S. M, 2009, Government expenditure and theory of efficient private and public finance. Momenbagh-Dhaka: Bangladesh Agricultural University Research System.
- Warner, A. M, 2014, Public Investment as an Engine of Growth. Washington, DC: IMF.
- Warner, A. M, 2014, *Public Investment as an Engine of Growth, IMF Working Paper*.

 Washington, DC: Research Department and Strategy, Policy, and Review Department, IMF.

- World Bank, 2004, *Public expendituremanagement, country assessment and action plan for hipcS-Cameroon*. Washington DC: World Bank.
- World Bank, 2006, Cameroon: Public Expenditure Management and Financial Accountability Review (PEMFAR). Washington DC: World Bank.
- World Bank, 2011, CAMEROON-The Path to Fiscal Decentralization-Opportunities and Challenges. Wasington DC: World Bank.
- World Bank, 2016, *Project information document (pid) concept stage- Report No.: PIDC18719.* Washington DC: World Bank.

Webliography:

http://www.imf.org/external/np/exr/facts/hipc.htm

http://www.imf.org/external/data.htm

http://databank.worldbank.org/data/home.aspx

http://dataportal.opendataforafrica.org/xedzxdg/afdb-socio-economic-database-1960-2016

https://www.researchgate.net/publication/233981204

APPENDICES

Annex I: Cameroon Key Economic and Social Indicators (1981 – 2001)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Real Setor																					
Real GDP growth (%)	17.1	7.6	6.8	7.5	8.1	6.8	-22	-7.9	-1.8	-6.2	-3.8	-3.1	-3.2	-2.5	3.3	5.0	5.1	5.0	4.4	4.2	5.3
Real GDP per capita growth (%)	13.7	4.6	4.0	4.7	5.3	3.9	4.9	-10.5	-4.7	-9.0	-6.6	-5.9	-6.0	-5.3	0.5	2.1	2.2	22	1.6	1.3	24
RGDP per capita in 1990US\$	1,051	1,100	1,144	1,197	1,260	1,310	1,246	1,115	1,063	968	903	850	799	757	760	777	794	811	824	835	855
CPI (% change), (%)	7.5	15.3	20.5	12.1	4.2	4.3	2.8	1.7	1.6	1.5	-0.6	1.9	-3.7	12.7	25.8	6.6	5.1	0.0	29	0.8	2.8
Total investment in % of GDP	27.2	24.8	26.0	25.9	24.9	25.5	24.7	20.9	17.1	17.8	16.7	13.5	16.6	15.3	14.5	15.4	16.2	17.5	18.7	16.4	17.8
Gross public invest. as share of GDP (%)	4.5	4.2	4.9	6.6	7.7	10.4	11.4	9.2	6.1	5.5	4.0	2.7	1.8	1.3	1.2	0.5	1.0	2.0	2.3	1.4	2.1
Population growth (%)	2.9	2.8	2.7	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.1	3.0	3.0	3.0	2.8	2.8	2.8	2.8	-2.8	2.8	2.8
Fiscal (in percentage of GDP)																					
Overall surplus/deficit, excl. all grants	-0.2	0.2	4.1	-0.3	-1.6	-1.2	-13.0	-5.9	-4.5	-7.6	-7.0	-7.9	-6.3	-9.1	-3.2	-1.5	-1.4	-1.7	-3.4	1.4	2.0
Overall surplus/deficit, incl. all grants (%)	-0.2	0.2	4.1	-0.3	-1.6	-1.2	-13.0	-5.9	-4.5	-7.6	-7.0	-6.6	-6.3	-9.1	-3.1	-1.3	-1.0	-1.4	-3.2	1.4	2.4
Govern revenue, incl. all grants	20.9	24.7	26.5	22.6	21.0	21.4	18.4	16.4	16.0	14.3	16.4	15.7	13.7	10.2	13.1	14.8	15.1	16.5	15.7	18.8	21.0
Govern revenues, excl. all grants (%)	20.9	24.7	26.5	22.6	21.0	21.4	18.4	16.4	16.0	14.3	16.4	14.4	13.6	10.2	13.0	14.6	14.7	16.2	15.5	18.8	20.6
Gov. Expenditure	21.1	24.5	22.4	23.0	22.6	22.6	31.3	22.3	20.6	21.8	23.4	22.3	20.0	19.3	16.2	16.1	16.1	17.9	18.9	17.4	18.6
External (in % of GDP)																					
External current account	-6.8	5.0	23	4.3	4.2	-3.3	-6.3	-5.1	-21	-4.4	-2.2	-25	-5.4	-4.4	-0.9	-4.1	-28	-25	-4.3	-1.7	-22
External current account excluding grants	-7.2	4.6	1.9	3.9	3.8	-3.7	-6.5	-5.3	-26	4.6	-2.9	-4.1	-5.9	-4.9	-1.9	-4.4	-2.8	-2.8	-4.3	-1.7	-22
Exports of goods and services	25.3	36.0	32.7	33.0	33.4	23.3	16.7	16.0	20.7	20.4	20.8	20.5	17.1	22.1	25.7	22.5	25.3	26.5	24.4	30.7	31.8
Imports of goods and services	29.0	27,7	26.5	24.1	21.9	20.7	18.2	16.0	18.0	20.1	17.0	18.3	16.0	19.5	20.7	20.5	22.4	24.8	24.7	26.8	29.2
External public debt	15.8	16.7	16.3	15.4	26.4	26.5	27.8	26.5	30.7	38.0	49.0	54.2	63.6	107.2	85.3	77.6	73.8	77.0	76.7	69.6	67.1

SOURCE: World Bank Policy Research Working Paper 3219, February 2004 by Christian A. Emini et al 2004

Annex 2. Stock of arrears to general government final consumption ratio

Year	Total stock of arrears at year-end (Cur. USD)	General government final consumption expenditure (current US\$)	Stock of expenditure payment arrears as a percentage of General government final consumption expenditure	ratio arrears to GDP (%)
1980	5600000.73	715130689.66	.78	.07
1981	12400000.36	741402370.93	1.67	.14
1982	18500000.24	706028519.53	2.62	.22
1983	22800002.25	765930903.83	2.98	.27
1984	21400000.90	817909183.83	2.62	.24
1985	31700000.17	772669545.08	4.10	.34
1986	143800005.32	1269198515.52	11.33	1.19
1987	218999996.78	1576324798.54	13.89	1.57
1988	325599908.83	1412889707.72	23.04	2.30
1989	267025033.91	1264879691.55	21.11	2.11
1990	474994836.29	1499046729.56	31.69	3.75
1991	1081731934.42	1739844504.03	62.17	7.67
1992	581131362.08	1539183141.24	37.76	4.49
1993	1340933276.91	1678521379.79	79.89	9.94
1994	1082262539.86	864937903.46	125.13	12.14
1995	1493767564.65	757710296.92	197.14	16.53
1996	1082294347.95	892917985.86	121.21	10.47
1997	1564260699.67	895496917.75	174.68	15.12
1998	896632047.42	875581139.02	102.40	9.08
1999	711000000.00	991881558.36	71.68	6.82

SOURCE: AFDB Socio Economic Database, 1960-2016

Annex 3. Central government deficit

Year	Central government, Fiscal Balance (% of GDP)	Year	Central government, Fiscal Balance (% of GDP)
1980	.24	1999	-2.85
1981	20	2000	4.39
1982	.15	2001	1.29
1983	3.60	2002	2.20
1984	31	2003	1.49
1985	-1.38	2004	1.81
1986	-1.05	2005	3.81
1987	-11.43	2006	33.08
1988	-5.18	2007	4.35
1989	-3.99	2008	2.21
1990	-6.68	2009	08
1991	-6.14	2010	65
1992	-5.81	2011	-1.77
1993	-5.56	2012	87
1994	-8.01	2013	-3.93
1995	-2.70	2014	-3.95
1996	-3.57	2015	-5.30
1997	-3.13	2016	-5.69
1998	-3.65		

Source: AFDB Socio Economic Database, 1960-2016

Annex 4. Private sector participation

	Gross capital formation, private sector (% of GDP)	Gross fixed capital formation, private sector (% of GDP)	Domestic credit to private sector by banks (% of GDP)
1980	18.59	15.58	29.54
1981	24.85	20.05	31.16
1982	22.54	16.39	31.24
1983	23.61	16.25	30.89
1984	23.76	12.82	25.23
1985	22.97	9.49	22.88
1986	23.94	14.38	24.02
1987	23.28	13.13	25.87
1988	19.63	11.61	24.39
1989	15.71	12.02	25.07
1990	16.46	11.88	26.38
1991	15.18	12.66	26.42
1992	12.05	11.65	12.52
1993	14.96	11.23	10.27
1994	14.11	10.41	9.23
1995	12.46	11.00	8.20
1996	12.76	11.25	7.90
1997	13.65	11.93	6.54
1998	15.26	12.31	7.40
1999	16.83	12.29	7.80
2000	13.91	13.91	8.23

Source: Data from database: World Development Indicators & AFDB Socio Economic Database, 1960-2016

Annex 5. Economic growth

Period in years	GDP growth (annual %)	GDP per capita growth (annual %)	Period in years	GDP growth (annual %)	GDP per capita growth (annual %)
1980	-1.965291669	-4.801970722	1998	4.895359526	2.127502474
1981	17.08268225	13.65939469	1999	4.062278838	1.341577534
1982	7.516202606	4.346593292	2000	4.173581032	1.469361945
1983	6.866830566	3.695822275	2001	4.514271087	1.818842267
1984	7.474572543	4.270605296	2002	4.009044571	1.343211516
1985	8.063161672	4.832862501	2003	4.030993316	1.377701944
1986	6.77166308	3.575335068	2004	3.701854054	1.066485345
1987	-2.146650212	-5.074369847	2005	2.296852856	-0.295828207
1988	-7.823631975	-10.57082221	2006	3.224002985	0.614638484
1989	-1.819120513	-4.723251262	2007	3.255664493	0.652415463
1990	-6.105697646	-8.854641911	2008	2.884046234	0.295871169
1991	-3.808599372	-6.594071677	2009	1.931850591	-0.627824484
1992	-3.100003211	-5.874684481	2010	3.268648874	0.68002481
1993	-7.932066575	-10.53532023	2011	4.140591847	1.53499427
1994	2.063402475	-0.782408279	2012	4.588738701	1.979159013
1995	4.128370945	1.267167912	2013	5.561688129	2.939760897
1996	4.911939543	2.071609595	2014	5.926964959	3.313571167
1997	5.314158464	2.502169906	2015	5.773247581	3.185280064

AFDB Socio Economic Database, 1960-2016