

The Political Economy of Financial Reforms in Cameroon

Neba Cletus Yah

Department of Economics and Applied Management

Laboratory of Theoretical and Applied Economics

University of Douala

Email: yah_neba@yahoo.fr

Received: January, 2020; Accepted: June, 2020; Published: October, 2020

Permalink/DOI: <http://dx.doi.org/10.17977/um002v12i22020p127>

Abstract

The aim of this study is to analyse the factors that influence the adoption of financial sector reforms in Cameroon. The Abiad et al. (2008) technique is used to construct a financial reform index for Cameroon and the ordered logit model employed to identify its drivers for the period 1973-2017. The results show that financial reforms in Cameroon follow a progressive and constant pace and stands at the level of 88% in relative terms in 2017. The process of financial reforms is driven by the level of financial development, institutional quality, trade openness and economic crisis.

Keywords: *Financial reforms, political economy, Cameroon*

JEL Classification: G2; E22; E61

INTRODUCTION

Financial sector reforms have been high on the agenda of policymakers during the last few decades. In many developing countries, these reforms were pursued as part of broader Structural Adjustment Programmes and were expected to bring about significant economic benefits, in particular through a more effective mobilisation of domestic savings and a more efficient allocation of resources. Though the trend worldwide was toward more liberalised financial systems, reform experiences differed considerably from one country to another, with varying speeds and magnitude (Abiad and Mody, 2005). Most countries experienced long stretches with no policy change and, occasionally, previous reforms were reversed (Abiad, Detragiache and Tressel, 2008). This raises the question on what explains why countries adopt and shape different financial reform measures. The objective of this paper is therefore to explain these variations in the case of Cameroon. To achieve this objective, a financial liberalisation index for Cameroon is constructed using the Abiad et al. (2008) methodology. This index aims at quantifying the nature of financial liberalisation (sequencing, pace, magnitude and direction of policies implemented) and permit the analysis of the drivers of financial liberalisation in Cameroon.

Though this study adds to the literature on financial reforms by being the first to analyse the political economy of financial reforms in Cameroon, the use of the financial liberalisation index helps identify changes in financial market policies and quantify the extent to which they contribute to liberalizing financial markets. It

also allows controlling for periods in which governments decide to re-control markets (for instance during or after periods of severe financial and/or economic crisis); therefore improving the accuracy in determining the magnitude and timing of changes in various dimensions of financial market policies. Furthermore, this curbs issues of over-parameterisation and/or multicollinearity associated with traditional or single dimension proxies of financial reforms (Abiad and Mody, 2005).

The rest of the chapter is organised as follows: section two reviews the literature on the nature and determinants of financial liberalisation. In section three, the financial liberalisation index for Cameroon is constructed and its nature determined. Section four then outlines the methodology that will be used to analyse the drivers of financial liberalisation in Cameroon. These results are discussed in section five. Section six concludes and highlights policy implications.

LITERATURE REVIEW

The literature on the determinants of financial liberalisation is not very vast. This led Drazen to note that 'it is striking how little statistical testing there has been (Drazen, 2000). The pioneers in this domain were Abiad and Mody (2005). They drew from theories of the political economy of economic reforms to come out with a set of causes that were likely to explain why and when countries decided to undertake financial reforms. They were followed by other authors such as Pina (2011), Huang (2006, 2010), Bonghoon and Lawrence (2006). These studies employed either ordered outcome modelling techniques (Abiad and Mody, 2005; Bonghoon and Lawrence, 2006), or the within groups technique (Huang, 2006, 2010) on cross country data to investigate the effects of different causal factors. The determinants of financial liberalisation highlighted in these studies can be summarized into the following five categories: domestic political factors, international political factors, domestic economic factors, international economic factors and domestic institutions.

Domestic Political Factors

Financial repression tends to privilege a small amount of elites with access to investment capital, corporate control and foreign exchange licences, while the costs of the resulting economic distortions are borne by the population at large. On the one hand it could be argued that the degree of the political elite's protection from electoral competition should be negatively associated with financial development. Autocratic governments tend to be accountable to the military/ industrial elite, which is likely to seek to control financial resources to prevent entry and competition. Democratisation reduces the power of the privileged few, which benefit from financial repression. In competitive elections governments can be punished for economic mismanagement and creating or preserving income inequality.

On the other hand there is the political replacement effect advanced by Acemoglu and Robinson (2002) which argues that if economic and institutional changes increase the probability that the incumbent political elite will lose political power and future rents, innovations will be adopted by political elites that are subject to competition and those that are highly entrenched, meanwhile elites that

are entrenched, but still fear to be replaced will block innovation. Financial development is an example of an economic innovation which dilutes the privilege of incumbents. This argument would suggest that the pattern of financial liberalisation is non-linear, and both extremes of the political spectrum – full democracies and extreme autocracies – are more likely to adopt financial liberalisation than intermediate regimes, where the political elite is more concerned about remaining in power.

Secondly, the effect of major political instability on financial sector policies is considered. The more unstable a regime is, the greater the incentive to control financial resources in the economy to be able to buy off potential threats to its tenure. Unstable systems are also more vulnerable to capital flight and changes in investor confidence and capital controls may be implemented to hinder capital outflows.

Thirdly governments differ in their policy preferences depending on which socioeconomic interest within the population they represent. The political partisanship literature assumes that right-wing governments are supported by the highly skilled and holders of financial assets (Quinn and Inclan, 1997). Owners of capital generally prefer not to be restricted in how they allocate their capital and will therefore support increasing financial globalisation. Moreover, financial liberalisation restricts the government's macroeconomic policies to those preferred by investors, such as price stability and lower taxes, again benefiting domestic holders of capital. This has been termed by Quinn and Inclan (1997) as the 'partisan macro-policy effect'.

However, this preference of holders of capital should be particularly strong in countries which are rich in capital. Holders of capital in labour-rich countries on the other hand might resist financial liberalisation, as they benefit from capital scarcity in the domestic market, as the rate of return to capital in a closed domestic market exceeds the rate in the rest of the world. Left wing governments representing labour interests may be unwilling to adopt policies of liberalisation, which may result in a period of unemployment as previously favoured sectors contract. However, in labour-rich countries labour will benefit from financial liberalisation in the medium to long term as foreign investment will be attracted and employment created. One would therefore expect that poor countries with left-wing governments would welcome liberalisation – this is known as the Quinn and Inclan's (1997) 'partisan relative price effect'.

Finally, we consider the political power of private sector actors to influence government policy. Pressure to liberalise finance is likely to come from the services sector. Financial intermediaries benefit from financial liberalisation, which raises interest rate margins, presents arbitrage opportunities between domestic and international interest rates and allows firms to serve multinational clients (Huang, 2008). Pressure to continue repression is likely to come from the manufacturing and agricultural sectors in the economy, which have been the main beneficiaries of selective credit policies. However, in repressed financial systems the banking sector might form a coalition with its clients to continue the profitable quid-pro-quo associated with preferential credit policies and government credit guarantees to cover non-performing loans in bank portfolios. For banks' effectiveness in lobbying for liberalisation, the degree of market concentration in the banking sector is

important, as it determines how easily banks can overcome collective action problems.

International Economics Factors

The political economy literature at least partially attributes the trend towards financial liberalisation to the increasing opportunities offered and constraints imposed by the international financial markets. Increased international financial integration gives financial asset holders the opportunity to increase profits beyond the constraints imposed by domestic savings and investment opportunities. They therefore lobby for regulatory change, both regarding government control over domestic financial flows and barriers to international capital mobility. If the government does not respond to these demands for changes, investors may be tempted to circumvent capital controls and place their funds abroad. Governments have therefore become less and less able to impose the cost of financial repression on financial asset holders and are forced to alter their strategies by the uncoordinated exit and evasion of financial market players.

Abiad and Mody (2005) furthermore stress the importance of learning and competition effects in financial sector reform. Governments learn from the experience of other countries (particularly within regions) and are also competing for international financial capital. They demonstrate that successful liberalisation in the regional leader country has significant positive effects on the probability of financial sector reform.

Financial and balance of payments crises are expected to have an ambiguous effect on financial liberalisation. On the one hand financial fragility may trigger reversals in liberalisation. This may be to stem capital outflows or because governments realise that financial liberalisation has been premature and that regulation needs to be strengthened before banks can tap into the international financial markets again. On the other hand a balance of payments or currency crisis might leave the government little option but pursue policies that are likely to reassure and therefore attract international investors. Such policies are likely to be reinforced if the government is also subject to pressures from international financial institutions as discussed above

Domestic Institutions

The final factor in the analysis of financial liberalisation is the issue of institutional quality. Banking systems become fragile unless they are well regulated and monitored by a non-corrupt supervisory authority. Financial liberalisation exacerbates adverse selection problems as interest rates are liberalised and the intermediation of foreign funds can lead to additional risks, such as maturity and currency mismatch. Countries which have liberalised their financial systems without putting in place an effective system of prudential regulation first have at best failed to reap the benefits of financial globalisation and at worst have suffered major financial crises (Pina, 2011).

The Nature of Financial Liberalisation in Cameroon

Willianson and Mahar (1998) in their survey of the financial liberalisation process in 34 countries around the world noticed that the financial liberalisation displayed wide differences in terms of pace, extent and sequencing. In this section,

the nature of the financial liberalisation process in Cameroon is captured and the financial liberalisation index for Cameroon is constructed using the Abiad et al. (2008) methodology.

The Financial Liberalisation Process in Cameroon

Cameroon undertook the liberalisation of its financial sector in 1990, in the framework of broad Structural and Adjustment Reforms (SAPs). The financial reforms had as aim the development of a strong and efficient financial system that will be able to meet the financing needs of an economy that will henceforth be controlled by market forces. We understand financial liberalisation to encompass official government policies that focus on deregulating credit controls, deregulating interest rate controls, removing entry barriers for foreign financial institutions, privatising financial institutions, removing restrictions on foreign financial transactions and building a strong supervisory framework. We therefore analyse the process of financial liberalisation in Cameroon along these lines.

Credit Controls

Prior to 1990, credit controls were implemented in the financial sector in the forms of directed credit programmes in favour of priority sectors, the placement of credit ceilings and floors on credits allocated to different sectors and the implementation of differential interest rates in favour of certain sectors. High reserve requirements were also imposed in order to raise cheap resources for the government. All these measures were imposed so as to direct credit to sectors that they deemed important. With the putting in place of monetary programming in 1991 and the money market in 1994, all these policies were abandoned. The allocation of credit was therefore left into the hands of the forces of demand and supply.

Interest Rate Controls

Interest rate deregulation started in 1990 with the removal of interest rate ceilings and preferential rates for favoured sectors. This was replaced by the putting in place of minimum deposit rates and maximum lending rates. The task of determining the interest rate is thus freely left in the hands of the market within the interest rate boundaries. The boundaries serve as a protection against the risk of spoliation and exploitation of depositors and lenders respectively. This therefore shows the important role of the state in the process of financial liberalisation. The aim of interest rate liberalisation is to instil competition and enhance the efficient allocation of resources to the most productive sectors of the economy.

Entry Barriers

In 1973, Cameroon nationalised all the banks in its financial system (NCC, 1973). Prior to this, the Cameroonian financial banking system was made up only of the branches of foreign banks from the colonial masters. These banks therefore served the interest of the masters. It is as such that Cameroon in developing its development strategy considered the financial sector a very important tool and decided to nationalise all the banks that existed. Since then, entry was granted only on the condition that the state was the majority shareholder. In 1990, the entry barriers were uplifted with the reform of the financial sector. This was done mainly to attract private joint venture banks with foreign collaboration with the hope that

such banks would bring in much needed foreign capital and technical know-how, infuse modern banking skills to the domestic banks, and, widen as well as deepen the national financial structure. Also, with the promulgation of the law on freedom of associations, we noticed a massive creation of micro-finance establishments. These institutions were first acting under the control of the ministry of agriculture and were out of official banking control. But, noticing their increasing importance they were brought under the control of COBAC.

Privatising Public Financial Institutions

The financial liberalisation process in Cameroon also involved the withdrawal of the state from the management of financial institutions. It is as such that in the process of restructuring the banking system after the financial crisis that started in 1990, the privatisation of banks was undertaken. The process ended in 1997 with the complete withdrawal of the state as majority shareholder from all banks. It should be noted that prior to liberalisation; the state was the main economic agent and as such had the greatest part of deposits in the financial system. With the economic crisis, the state had to withdraw its savings and this weakened the balance sheet of financial institutions. Also, the banks had to finance public enterprises on basis other than that of efficiency and this had serious consequences when such public projects turned out to be white elephants. Privatisation was therefore undertaken with the aim that private individuals were better managers and that it would improve the efficiency of such institutions for resource collection and allocation

Restrictions on International Financial Transactions

As Cameroon is a member of the Franc zone, there is no restriction on the movement in the zone. However, with countries outside of the zone, some restrictions do exist and is implemented by the Ministry in charge of finance in each member state. This relative openness of the financial account of Cameroon stayed until 1993 when convertibility was restricted first between member countries and France and secondly between the two economic zones (CEMAC and UMOA). This restriction was imposed in order to limit capital flight prior to the devaluation in 1994. With the regain of liquidity of the banking system and the economic recovery of the economies of the CEMAC zone, exchange controls were harmonised in 2000. There was thus a return to more liberal relative financial openness. Also, the creation of the Douala Stock Exchange in 2001 was expected to go a long way to increase capital transactions in the country.

Prudential Regulation

Before the creation of COBAC in 1992, banking supervision was in the hands of the Minister in charge of finance of each CEMAC member country. Each country therefore had to put in place a structure in charge of the supervision of financial institutions. The crisis of the mid 80s revealed the weakness of such a structure. In 1992, all six member states decided to harmonise banking regulation in the sub- region. COBAC was therefore created to assure the supervision of banking activities and institutions in the CEMAC zone. The role of supervision is to ensure efficiency and stability of the financial system. In order to better perform this function, COBAC enacted a set of prudential ratios which include: the risk

covering ratio which states that net capital of financial institutions should cover at least 5% of total credits; the risk division ratio which avoids that banks should not concentrate the total of their credits on a single borrower. It is set at 45% of net capital. Also, banks cannot concentrate credit of more than 800% of their net capital on their big customers; the liquidity ratio which states that the liquid resources of banks should be at least 100% of their less than one month maturing obligations; and the risk transformation ratio which is the ratio of more than five year resources to assets of more than five years. This ratio should not be less than 50%. Since the implementation of these ratios, the banking system of Cameroon regained its liquidity and stability (Njoda & Bitu, 2009).

Reform in Monetary Policy

The way monetary policy is conducted has a direct impact on the financial sector. After the full liberalisation of the interest rate and elimination of credit ceilings, the monetary policy stance changed from direct to indirect method of control. Under the indirect monetary policy stance, there is no direct control on the price or interest as well as on the volume of loans of commercial banks. Market behaviour is aligned through the use of indirect monetary policy instruments such as bank rate; cash reserve requirement, and open market operations. For example, in order to absorb the persistent over-liquidity of the banking system in Cameroon, BEAC increased the cash reserve requirement in 2001 (Njoda & Bitu, 2009).

Capital Market Reform

In 2001, Cameroon created the Douala Stock Exchange (DSX). The DSX started operations effectively in 2006 with one listed company, the *Société des Eaux Minérales du Cameroun* (SEMC). Since then it has helped in the mobilisation of public savings for *Société Camerounaise des Palmeraies* (SOCAPALM) in 2009 and the Republic of Cameroon since 2010.

Construction of financial liberalisation index for Cameroon

Financial liberalisation is a process that involves the implementation of a number of policies as discussed above. In order to show the degree or the level of financial liberalisation at a particular time, a financial liberalisation index (FLI) is constructed based on the method proposed by Abiad et al. (2008). Their measure of financial liberalisation takes into account seven different dimensions of financial sector policies. These are:

- *Credit controls and excessively high reserve requirements*: directed credit towards favoured sectors or industries, ceiling on credit toward sectors, and high reserve requirements;
- *Interest rate controls*: direct interest rate controls by the government, or interest rate controls through the use of floors, ceilings and interest rate bands,
- *Entry barriers*: licensing requirements for newly established domestic financial institutions, entry barriers for foreign banks, and restrictions on certain types of banking practices, such as specialized bank services or establishing universal banks;
- *Securities market policy*: restrictions on staffing, branching and advertising, and the establishment of securities markets;

- *State ownership in the banking sector*: Ownership of banks is the most direct form of control a government can have over credit allocation. Although it is most often the result of a conscious policy decision by the authorities (e.g., in India beginning in 1969), state ownership can also be the result of nationalisation following a banking crisis (e.g., Mexico in 1982 or Indonesia in 1998).
- *Restrictions on international financial transactions*: Restrictions on international financial transactions were often imposed to give the government greater control over the flow of credit within the economy, as well as greater control over the exchange rate. These restrictions included multiple exchange rates for various transactions, as well as transactions taxes or outright restrictions on inflows and/or outflows specifically regarding financial credits.
- *Prudential regulations and supervision of the banking sector*: Of the seven dimensions, this is the only one where a greater degree of government intervention is coded as a reform. To code this dimension, we ask the following questions: Does a country adopt risk-based capital adequacy ratios based on the BASEL I capital accord? Is the banking supervisory agency independent from the executive's influence and does it have sufficient legal power? Are certain financial institutions exempted from supervisory oversight? How effective are on-site and off-site examinations of banks?

For each of these seven dimensions, a country gets a score that runs from zero to three. The meaning of the scores is as follows:

- 0 means that for a particular dimension of financial market policies, the country is fully repressed;
- 1 means partial repression;
- 2 means largely liberalised; and
- 3 means fully liberalised.

The way the financial liberalisation measure is constructed allows for identifying changes in financial market policies and quantifying the extent to which they contribute to liberalising financial markets. It also allows us to take into account periods in which governments decide to re-control markets, for instance during or after periods of severe financial and/or economic crisis. In short, the measure enables to determine more exactly the magnitude and timing of changes of various dimensions of financial market policies. This financial liberalisation dataset improves on data used in earlier studies in a number of ways. In most cases, the data in these earlier works have one or more of the following weaknesses.

First, many papers take a crude measure of financial liberalisation, for instance by taking a value of 0 for the years in which a particular financial market is not liberalised and a value of 1 from the year onwards when the market is officially liberalised. Harris, Schiantarelli and Siregar (1994), Haramillo, Schiantarelli and Weiss (1996), Hermes and Lensink (1996), and Bekaert, Harvey and Lundblad (2001), to name a few, use this type of measure. Yet, financial liberalisation is a process, rather than just one event. In Cameroon, Tabi (1999, 2000) adopted this approach in the early periods of liberalisation.

Second, in several papers the analysis focuses on just one or a few dimensions of financial liberalisation. Levine (2001), for example, looks only at

opening up domestic banking and stock markets to foreigners, Eichengreen and Leblang (2003) consider only capital account liberalisation, and Bekaert, Harvey and Lundblad (2001) focus on stock market liberalisation. These papers thus do not analyse the effects of financial liberalisation in all its important dimensions.

Third, some studies only look at the effects of financial liberalisation in the short term of say up to ten to fifteen years. This is true for all studies using firm-level and this is not surprising, given the difficulty of getting consistent firm-level data for a long time-period. However, even some of the country-level studies take a relatively short perspective. Bekaert, Harvey and Lundblad (2001) investigate the relationship using data for the period 1980-97.

In this study, we consider a time period from 1973 to 2017 and the above seven dimensions of financial liberalisation for the construction of the financial liberalisation index for Cameroon. The construction of the index is shown in the table 1A in the appendix. In figure 1, we have the evolution of the process of financial liberalisation in Cameroon. From the graph, we notice that before 1990, the Cameroonian financial sector was highly repressed with an index of 2/21. In 1990, reforms started and has since then been growing. Presently, the score for Cameroon stands at the level of 16/21 due mainly to restrictions in the domain of international capital mobility and weaknesses in prudential regulations. Though considerable efforts have been made in the domain of prudential regulation, the COBAC regulatory system is still to meet international best practices set by the BASEL II codes.

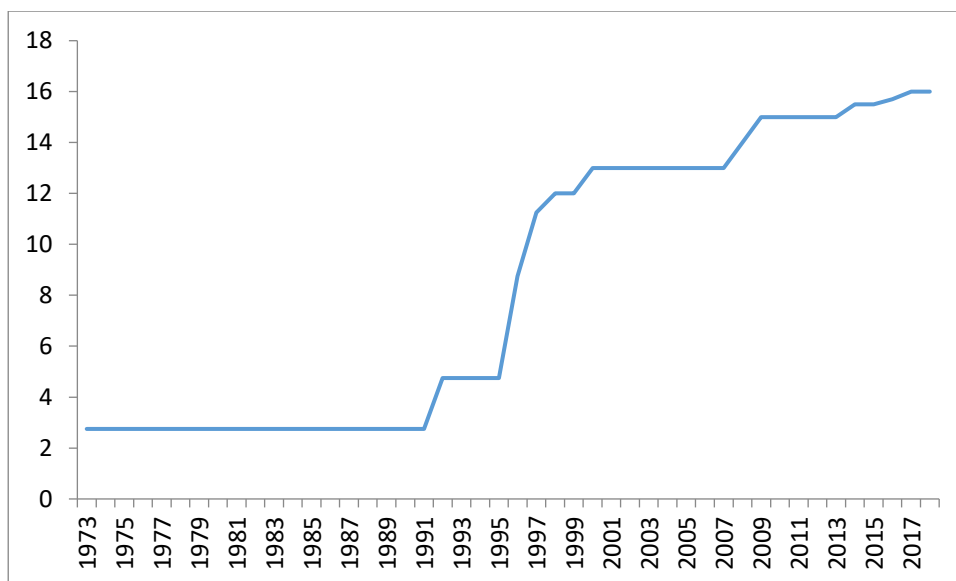


Figure 1: Evolution of the financial liberalisation process in Cameroon

Source: Authors

Figure 1 also shows that for the case of Cameroon, there were no episodes of reversals. Since the process started in 1990, it has been continually moving towards a more liberalised system. Thus, generally, the Cameroon financial system is averagely liberalised.

FEATURES OF FINANCIAL LIBERALISATION: METHODOLOGY

This section draws from the study of Abiad and Mody (2005) that specified a model used to investigate the drivers of financial liberalisation followed by the discussion of the econometric framework that will be used to analyse it.

Model Specifications

The general model structure that captures the effects of the various determinants of financial liberalisation on policy changes is specified as follows:

$$\Delta Y_t = \beta' X_t + \varepsilon_t \quad (1)$$

The dependent variable ΔY_t is used to measure the policy change, the difference between the level of financial liberalisation in next period, Y_t , and the current level of financial liberalisation, Y_{t-1} . X_t is the vector of the determinants of reforms (polity, institutional quality, IMF/World Bank dummy, openness, fiscal deficit, crisis dummies, per capita GDP).

Econometric Modelling

As with many limited dependent variable models, it is useful to specify a suitable model for ordered response data in terms of an underlying latent variable;

$$y_i^* = x_i' \beta + \varepsilon_i \quad (2)$$

for $i = 1, \dots, N$, where x_i is a vector of observations on a set of explanatory variables, β is a vector of unknown parameters, and ε_i is a random-error term independently distributed with distribution function F . If y_i^* was observed for all observations, β could be consistently estimated by ordinary least squares without requiring a distributional assumption on ε . For the financial liberalisation index data considered in this study, y_i^* is not observed. Rather, the observed dependent variable, y_i , is discrete, taking one of the values $\{1, 2, \dots, J\}$, and is related to y_i^* as follows:

$$y_i = \begin{cases} 1 & \text{if } y_i^* < \alpha_1 \\ 2 & \text{if } \alpha_1 \leq y_i^* < \alpha_2 \\ \vdots & \cdot \\ J & \text{if } \alpha_{J-1} \leq y_i^* \end{cases} \quad (3)$$

With the α_j being additional parameters such that $\alpha_1 < \alpha_2 < \dots < \alpha_{J-1}$, Thus, the range of y^* is partitioned into J mutually exclusive and exhaustive intervals, and the variable y indicates the interval into which a particular observation falls. The dependent variable y is ordinal, and the α_j are treated as parameters to be estimated. The probability of a particular observed outcome for $2 \leq j \leq J-1$ is given by:

$$\Pr(y_i = j) = \Pr(\alpha_{j-1} \leq y_i^* < \alpha_j)$$

$$\begin{aligned}
 &= \Pr(\alpha_{j-1} - x_i' \beta \leq \varepsilon_i < \alpha_j - x_i' \beta) \\
 &= F(\alpha_j - x_i' \beta) - F(\alpha_{j-1} - x_i' \beta)
 \end{aligned} \tag{4}$$

Where F is the cumulative distribution function of ε_i and is assumed to contain no additional unknown parameters such that, for example, ε_i has a known variance. This assumption fixes the scale of the measurement of y^* but not the origin. Identification can be achieved by assuming a zero intercept (i.e., assuming that x_i does not contain a constant term) or by fixing one of the α_j . The former is adopted here.

The full sets of probabilities of the possible outcomes are;

$$\Pr(y_i = j) = \begin{cases} F(\alpha_1 - x_i' \beta) & \text{if } j = 1 \\ F(\alpha_j - x_i' \beta) - F(\alpha_{j-1} - x_i' \beta) & \text{if } 2 \leq j \leq J - 1 \\ 1 - F(\alpha_{J-1} - x_i' \beta) & \text{if } j = J \end{cases} \tag{5}$$

If we adopt the additional notation that $\alpha_0 = -\infty$ and $\alpha_J = +\infty$, we can write these more compactly as,

$$\Pr(y_i = j) = F(\alpha_j - x_i' \beta) - F(\alpha_{j-1} - x_i' \beta) \tag{6}$$

for all j . This defines a class of cumulative probability models in which a known transformation of the cumulative probabilities is taken to be a linear function of the x variables and only the intercept in this function differs across the categories:

$$F^{-1}\{\Pr[y_i \leq j]\} = \alpha_j - x_i' \beta \tag{7}$$

A natural estimator for this type of model is the maximum likelihood estimator. Defined as:

$$y_{ij} = \begin{cases} 1 & \text{if } y_i = j \\ 0 & \text{else} \end{cases} \tag{8}$$

Then, the log likelihood for the model is given by;

$$\log L = \sum_{i=1}^N \sum_{j=1}^J y_{ij} \log [F(\alpha_j - x_i' \beta) - F(\alpha_{j-1} - x_i' \beta)] \tag{9}$$

This is maximized with respect to $(\beta, \alpha_1, \dots, \alpha_{J-1})$, i.e., $M + J - 1$ parameters, where M is the number of exogenous variables, remembering that β (and hence M) does not include an intercept.

By far the most commonly used models to date for analysing ordered responses have been the ordered probit and ordered logit models (which take F to be standard normal and logistic, respectively). The ordered probit model, introduced by Aitchison and Silvey (1957), assumes that $\varepsilon_i \sim N(0, \sigma^2)$. Adopting the scale normalization $\sigma = 1$ and imposing a zero intercept for identification, the probabilities are given by,

$$\Pr(y_i = j) = \Phi(\alpha_j - x_i' \beta) - \Phi(\alpha_{j-1} - x_i' \beta) \tag{10}$$

Where, Φ is the cumulative distribution function of a standard normal distribution and the log likelihood in (9) with F replaced by Φ .

Data Sources and Definition of Variables

The dependent variable is the index of financial liberalisation constructed above. The other determining factors are captured as follows:

Domestic Politics:

To proxy for the accountability of the government we use the combined polity score -polity2 - as measured by the Polity IV database (Marshall, Jaggers and Gurr, 2003). Polity 2 is designed to record the regime's institutionalised authority characteristics. Firstly, the database records a democracy score (ranging from 0 to 10) for each country, based on the openness of the political process (i.e. the extent to which citizens can effectively express preferences about policies and leaders through elections) and the degree of restraints on the powers of the chief executive. The maximum score would be allocated to a democracy in which the executive is chosen in free and fair elections with universal suffrage and there are substantial checks and balances constraining the chief executive's power. Secondly each country has an autocracy score (again ranging from 0 to 10) based on how political leaders are selected (e.g. by designation or chosen from closed lists), the constraints on their powers and the regulation and competitiveness of political participation. Polities may have mixed authority traits and can have intermediate scores on both the democracy and authority scores. Subtracting the autocracy score from the democracy score of a country creates the polity2 variable. Higher scores of polity2 therefore indicate a higher degree of democracy. The polity2 variable appears to be a reasonable proxy of the extent to which the economically less privileged can express their dissatisfaction at the ballot box, We therefore use the polity2 variable to test whether the incumbent elite is more likely to block financial reform in more authoritarian systems, as opposition demands for equal access to resources can be ignored. A positive coefficient on the polity2 variable would be evidence of a democratisation effect, which enhances economic opportunities in line with political representation.

International Politics:

We capture international political pressure for financial liberalisation using dummy variables. The IMF dummy is equal to one for years in which countries had an IMF programme.

Domestic Economics:

Data on trade openness (imports + exports as a share of GDP) are taken from the World Development Indicators. We also include a dummy for economic crisis.

International Economics:

Datasets of institutional quality have been collected since the 1980s (e.g. the ICRG dataset), but were initially limited in scope and report data on very broad definitions of institutional quality, such as whether the "rule of law" applies in a country. More recently some data have become available on "regulatory quality" (e.g. Kaufmann, Kraay and Zoido-Lobaton (1999) from 1996), which are more relevant to the question of whether the banking system is well supervised. Given the paucity of institutional data in the early period we use GDP per capita as a very

broad proxy for a country's institutional development, as this is available for the whole period. This proxy was also used by Girma and Shortland (2005) and Abiad and Mody(2005).

In Table 1 below, the definition, sources and expected signs of the different variables are given.

Table 1: Variables, data, sources and expected signs

Variable type	variables	Definition	Sources	Expected signs
Dependent variable	FLI	Financial Liberalisation Index	Authors calculations	
	FD	Financial Development (captured by M2)	WDI 2018	-
	IQ	Institutional quality captured by GDP per capita	WDI 2018	+
Explanatory variables	Polity	Democracy and political system	Polity IV database	+
	IMF	IMF/WB Dummy capturing operations with the Bretton Woods institutions	Authors using WDI 2018	+
	Crisis	Dummy capturing periods of economic crisis or negative growth	Authors using WDI 2018	+
	Trade	Trade openness captured as (exports + imports)/GDP	WDI 2018	+

Source: Authors

EMPERICAL RESULTS AND DISCUSSION

The estimation results are shown in table 2. These results were obtained using the Eviews 8.0 statistical software package. The choice between a logistic and probit model was done using the Akaike Information Criteria (AIC) and finally the logistic model was retained as it produced the lowest value of the AIC. The estimations were done in two steps. In the first step we determined the significant variables using the Z-statistics. Only these significant variables were then included into the second regression.

Table 2: Estimation results of the determinants of financial liberalisation

Variables	DEPENDENT VARIABLE: Δ FLI	
	First Estimations Coefficients	Second Estimation(With Significants Variables Only) Coefficients
FD	-0.252047*** (0.093626) [-2.692070]	-0.159146*** (0.053794) [-2.958425]
IQ	0.185296** (0.075742) [2.446399]	0.208621*** (0.073248) [2.848154]
TRADE	0.099770*** (0.032556) [3.064541]	0.086696*** (0.030702) [2.823783]
CRISIS	2.662211** (1.117091) [2.383163]	2.453489** (1.088538) [2.253930]
POLITY	-0.290158 (0.803310) [-0.361203]	
IMF	-0.421470 (3.108107) [-0.135604]	
	Pseudo R-squared: 0.30 LR statistic: 25.62247***	Pseudo R-squared: 0.28 LR statistic: 23.82211***

Note: values in parentheses () and brackets [] represent standard errors and Z-statistics of the coefficients respectively. *, **, *** indicate significance at 10%, 5%, and 1% respectively.

Source: Authors calculations using Eviews 8.0

From the results in Table 2, the likelihood ratio statistics are significant at 1% indicating that both models are statistically significant. The level of financial development, institutional quality, trade openness, and economic crisis were all found to be significant drivers of financial sector liberalisation in Cameroon. All the signs of the coefficients are in conformity with those predicted by theory. There exist a negative relationship between the level of financial development and the probability of undertaking financial sector liberalisation reforms. This implies that a low level of financial development prompts authorities to question existing financial sector policies and to undertake reform measures to revamp the sector. As such it can be clearly stated that one of the aims of undertaking reforms in Cameroon was to boost the development of its financial sector.

The other driving factors (institutional quality, crisis, and trade openness) all influence the probability of undertaking reforms positively as expected. However, the IMF dummy and Polity variables were found to be insignificant. This implies that the signing of agreements with international institutions such as the IMF, World Bank, etc. did not influence the decision to reform or not. Also, the non-significance of the polity variable indicates the absence of the democratisation effect in Cameroon. This can be understood as since independence, power has never changed hands through the electoral process and as such, the fear of opposition and

the loss of electorates or the effect of an incumbent to satisfy the electorate as a means of appreciation that could lead to reforms have never been observed.

CONCLUSION

The objective of this study was to characterise the financial liberalisation process in Cameroon and to determine the drivers of the process. To determine the nature of the financial liberalisation process in Cameroon, we constructed an index of financial liberalisation that captures the timing, extent and pace of the process. The index for Cameroon indicates that the process started in 1990 at a slow pace before accelerating in 1994. It reached its highest point in 2017 when it stood at 88.8% in relative terms and has remained at this point since then. The process has known periods of status quo, slow reforms and large reforms but has never witnessed reversals. This certainly shows that the Cameroonian financial authorities are undertaking the process in a slow, steady and prudent manner which is supposed to guarantee the success of the process in meeting its objectives.

As concerns the factors that drive financial sector reforms in Cameroon, using an ordered logit model, the level of financial development, institutional quality, trade openness and economic crisis were found to be significant determinants of the financial liberalisation process. This can be interpreted as if financial reforms were undertaken in order to improve on the low level of financial development, to meet the exigencies of an open economy, to correct and mitigate the occurrence of economic crisis, and finally due to an improvement in the quality of institutions in the country. As such, it is therefore important to study how financial liberalisation has impacted financial and economic development in the country.

REFERENCES

- Abiad, A., & Mody, A. (2005). Financial reform: What shakes it? What shapes it?. *American Economic Review*, 95(1), 66-88.
- Abiad, A., Detragiache, E., & Tressel, T. (2010). A new database of financial reforms. *IMF Staff Papers*, 57(2), 281-302.
- Acemoglu, D., & Robinson, J. A. (2002). *Economic backwardness in political perspective* (No. w8831). National bureau of economic research.
- Aitchison, J., & Silvey, S. D. (1957). The generalization of probit analysis to the case of multiple responses. *Biometrika*, 44(1/2), 131-140.
- Bekaert, G., Harvey, C. R., & Lundblad, C. (2005). Does financial liberalization spur growth?. *Journal of Financial Economics*, 77(1), 3-55.
- Kim, B., & Kenny, L. W. (2007). Explaining when developing countries liberalize their financial equity markets. *Journal of International Financial Markets, Institutions and Money*, 17(4), 387-402.
- Drazen, A. (2000), *Political Economy in Macroeconomics*, New Jersey: Princeton University Press.
- Eichengreen, B., & Leblang, D. (2003). Capital account liberalization and growth: was Mr. Mahathir right?. *International Journal of Finance & Economics*, 8(3), 205-224.
- Girma, S., & Shortland, A. (2008). The political economy of financial development. *Oxford economic papers*, 60(4), 567-596.

- Harris, J., Schiantarelli, F., & Siregar, M. (1994). The effect of financial liberalization on firms' capital structure and investment decisions: Evidence from a panel of Indonesian manufacturing establishments, 1981–1988. *World Bank Economic Review*, 8(1), 17-47.
- Hermes, N., & Lensink, R. (Eds.). (2013). *Financial development and economic growth: theory and experiences from developing countries*. Routledge.
- Huang, Y. (2005) What determines financial development? *Bristol Economics Discussion Paper No. 05/580*.
- Huang, Y. (2006) On the Political Economy of Financial Reforms, *Discussion Paper No. 06/586*, Department of Economics, University of Bristol
- Huang, Y. (2010). *Determinants of financial development*. Springer Nature.
- Haramillo, F., Schiantarelli, F., & Weiss, A. (1996). Capital market imperfections before and after financial liberalization: An Euler equation approach to panel data for Ecuadorian firms. *Journal of Development Economics*, 51(2), 367-386.
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2003). *Governance matters III: Governance indicators for 1996–2002*. The World Bank.
- Levine, R. (2001). International financial liberalization and economic growth. *Review of international Economics*, 9(4), 688-702.
- Marshall, M. G., Jagers, K., & Gurr, T. R. (2004). Political regime characteristics and transitions, 1800-2002. *Polity IV Project*. University of Maryland.
- Neba, C. & Ebo'oh, N. (2019) ARDL Modeling of the Impact of Financial Reforms on Private Domestic Saving in Cameroon, *International Journal of Economics, Commerce and Management*, vol. 7 Issue 10.
- Noula, A. G. (2012). Financial liberalisation and household savings in Cameroon: A bound testing approach. *Global Advanced Research Journal of Educational Research and Review*, 1(2), 015-024.
- Pina, G. (2015). The recent growth of international reserves in developing economies: A monetary perspective. *Journal of International Money and Finance*, 58, 172-190.
- Quinn, D. P., & Inlcan, C. (1997). The origins of financial openness: A study of current and capital account liberalization. *American Journal of Political Science*, 771-813.
- Tabi, A. J. (1999). Financial sector Reforms and financial Development in Cameroon: A test of the Mckinnon–Shaw model. *Revue Economie et Gestion appliquée, tome Université de Douala, Cameroun*, 1(2).
- Tabi, A. J. (2000) Impact of Interest Rate Policy and Financial Reforms on Economic Growth in the BEAC Zone: The Case of Cameroon, Unpublished Doctoral Thesis, University of Yaoundé II - Soa.
- Njoda, M. T., & Bitu, C. A. (2009). La reforme du secteur bancaire camerounais. *Revue africaine de l'Intégration Vol*, 3(2).
- Williamson, J., & Mahar, M. (1998). *A survey of financial liberalization* (No. 211). Princeton Univ International Economics.