

**FINANCIAL LIBERALIZATION, POLITICAL OPENNESS AND  
GROWTH IN DEVELOPING COUNTRIES: RELATIONSHIP AND  
TRANSMISSION CHANNELS**

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The purpose of this paper is to study the relationship between financial integration, political openness, and economic development measured with GDP per capita growth. Our empirical investigation covers a sample of 108 developing countries between 1984 and 2008 and uses both static and dynamic panel data estimation. The results show that financial liberalization positively affects growth directly and through indirect channel like investment, trade and macroeconomic stability. It also supports financial development and promotes human capital. Even though democracy doesn't directly influence growth, it has an indirect positive effect on it through favoring international trade in addition to financial and human capital development. Otherwise, political instability negatively affects growth directly and indirectly through decreasing investment and increasing inflation.

*Keywords:* Financial Liberalization, Democracy, Political Stability, Economic Growth,  
Panel Data Econometrics

*JEL Classification:* O11, C23, F62, D72, P48

## 1. INTRODUCTION

During the last three decades, financial liberalization and political openness were the slogans of international financial authorities. This orientation was the expected result of several years of strict control applied by monetary authorities on financial operations after the wars and the financial crisis of the twentieth century, but also as a response to the rise of a new school of thought promoting democracy and financial liberalization led by the pioneering work of Lipset (1959) and McKinnon and Shaw in the early seventies. On the financial side, McKinnon (1973) and Shaw (1973) certify that financial liberalization is the most effective way to boost domestic saving, increase productive investment and ensure sustainable growth in developing countries. Other work falling under the same logic came forward a few years later, it is essentially the work of Galbis

(1977), Kapur (1976) and Mathieson (1980) which was called first generation works and advocate the superiority of financial liberalization through the flexibility of interest rates and its positive impact on saving and investment. On the political side, Lipset (1959) finds that a high per capita income is associated with a higher probability that the country is a democracy, whereas a low per capita income is associated with a higher probability that the country is an autocracy. Even though, those arguments were disagreed by many economists (De Haan and Siermann, 1996) and contradicted by the experience of some countries such as Spain and Portugal, which experienced most of their economic developments under authoritarian regimes, the most democratic countries still the most developed.

The main objective of this paper is to study the impact of the various shapes of financial and political openness on economic growth of developing countries. In fact, the majority of the developed countries has begun political reforms after they have reached a certain threshold of economic development which allows them to build solid political, legal and financial institutions that resist any form of political instability induced by frequent regime changes. Otherwise, many populations of other developing countries under economic and social pressures have chosen to rebel against authoritarian regimes and aspire to democracy, characteristic of developed countries, and likely to ensure them a sustainable economic growth. This paper is divided into three parts. The first part is dedicated to the study of the impact of financial liberalization on growth. In the second part, we focus on the relationship that links democracy and political instability to economic development. The third part is devoted to an empirical study on the relationship that links economic development to financial liberalization, democracy and political instability on a sample of 108 developing countries between 1984 and 2008.

## 2. FINANCIAL LIBERALIZATION AND ECONOMIC GROWTH: RELATED LITERATURE

The recent literature on financial liberalization has distinguished several channels through which financial liberalization influences economic growth. Unlike the first generation work of McKinnon and Shaw Successors, The new partisans of financial liberalization have not only denounced the repressive policies applied by various governments in term of interest rates control and restrictions on capital account transactions. They also identified new transmission channels through which financial liberalization can potentially affect economic growth. Kose et al. (2009) classify these channels into two broad categories: traditional channels that improve physical and human capital accumulation (allocation of international resources, reduced cost of capital, financial deepening and transfer of managerial know-how). There are also other channels that can bring collateral benefits to the economy by promoting foreign trade and judicious macroeconomic policies.

### **2.1. Traditional Channels**

First, the possibility of external financing induced by financial liberalization allows countries to avoid liquidity constraints (Fry, 1995; Shrestha and Chowdhry, 2007; Awan et al., 2010). Indeed, the increase in savings stimulates productive investment that creates jobs and allows an efficient use of the human capital (Laeven, 2003). In other words, access to the foreign capital increases growth potential by investing in profitable projects beyond what would be allowed by the only domestic saving (Koo and Shin, 2004).

Second, Stulz (1999) states that stock market liberalization generally decreases the cost of capital. This is explained by a respective decrease in the risk premium and agency costs. The first reason is justified by a better diversification and an optimal management of risk in the global financial market. The second reason is explained by more efficient monitoring of managers and a better supervision of investors. Henry (2000) incorporates the assumptions of Stulz (1999) and notes that the liberalization of the stock market led to a domestic investment boom thanks to a lower cost of capital following a decline in the risk premium. In fact, liberalization implies a lower cost of capital in a form of a lower expected return on stocks that led to an increase in productive investment more profitable for economic development (O'Toole, 2014).

Third, financial liberalization through the free movement of capital flows, particularly FDI, plays an important role in the dissemination and transfer of technological innovations and managerial know-how. These transfers can increase productivity, which in turn has a favorable effect on economic growth (Henry, 2007; Keller, 2010).

Finally, barriers opening to foreign banks will have several beneficial effects on the financial sector (Caprio and Honohan, 1999; Bruno and Hauswald, 2014). In fact, foreign banks entering introduce new services and means of payment (credit card and electronic payment) which encourage financial transactions and boost domestic trade. Then, the presence of foreign banks in the territory increases competition which will have two main consequences: on one hand, domestic banks will be forced to reduce their costs and to innovate and improve their services which could boost savings behavior and hence investment and finally the productivity and growth. On the other hand, increased competition between banks could exert pressure on governments to improve the standardization framework and banking supervision to prevent any drift or unfair competition (Chou, 2007).

### **2.2. Potential Collateral Benefits**

Kalemli-Ozcan, Sørensen and Yosha (2003) and Imbs (2006) demonstrate that country with a higher degree of capital account liberalization benefit of an optimal risk sharing mechanism that induces countries to specialize more in their comparative advantage industries. On the same principle, Islamaj (2014) demonstrate that risks

sharing positively affects specialization. Indeed, as soon as countries become financially integrated, they benefit from an inter-country risk sharing mechanism which enables them to take more risks and consequently to allocate more resources to the most productive sector (Mimir, 2016).

Jeanne and Gourinchas (2009) illustrate the disciplinary role of financial integration that can change the dynamic of domestic investment since it leads to a reallocation of capital to the most efficient and productive projects in response to changes in macroeconomic policies. In fact, governments are sometimes tempted to institute strict fiscal policies on productive equipment. The prospect of such policies tends to discourage investment and reduce growth. Otherwise, financial openness can have a positive impact on the monetary authority's decisions by discouraging them from applying such restrictive policies in the future since the negative consequences of such practices are more serious when the financial sector is liberalized.

Elsewhere, Eichengreen and Rose (2014) argue that imposing controls on capital movements sends a negative signal to international investors. In fact, restrictions on financial transaction reflect the assumption that the best macroeconomic policies are not adopted. On the same principle, Egbuna et al. (2013) state that the opening of the capital accounts usually report the adoption of a stable macroeconomic policy by the monetary authorities. Indeed, a deterioration of the economic environment of a country with a liberalized capital account led to capital outflows. Thus, capital account openness encourages monetary authorities of a country to adopt and maintain wise macroeconomic policies.

### 3. POLITICAL OPENNESS AND ECONOMIC GROWTH: RELATED LITERATURE

#### 3.1. Democracy and Economic Growth

One of the most discussed topics in comparative politics is the relationship between democracy and economic development. This relationship was the subject of many theoretical and empirical works. The arguments of Lipset (1959), in favor of democracy, have been widely criticized. Indeed, for most economists, the relationship between democracy and economic growth is not very obvious. Thus, the benefits of democracy in terms of growth can only be seen in the long term or through indirect channels that can positively influence economic development.

Thus, democracy promotes political stability by smoothing political transition while the power transfer is more violent in autocracies. Therefore, the more democracy lasts over time (increased stock of democracy) and the more political instability and uncertainty decrease, which encourages investment and growth (Blanco and Grier, 2009).

In addition, by fighting corruption and protecting property rights, democratic

institutions support investment and actively participate in the country's economic expansion. Jensen (2003) argues that democratic institutions are able to protect the interests of foreign investors while autocratic governments are often tempted to apply predatory policies on the foreign resources of the economy and cannot ensure credible property rights. In addition, democratic institutions are a bulwark against corruption as they implement active mechanisms of supervision and control on leaders and political elite (Sung, 2004; Adeleke, 2014). Similarly, Drury et al. (2006) show that electoral procedures in democratic countries prevent politicians from engaging in corrupt processes that can threaten their political survival.

Elsewhere, democracy has a positive effect on human capital because it is more favorable to population needs and allows implementing policies that promote the development and accumulation of human capital such as education and high school (Stasavage, 2005). In addition, democracy support competition among politicians, a situation where the vote of the population weighs, leading the political elite to take into consideration people interest and welfare (Gerring, Thacker, and Alfaro, 2012). Moreover, democratic institutions participate in the development of a network of voluntary associations that fight for human well-being (Webb, 2004). Still, democracy cultivates an ideology of equality which helps improve the quality of life of the poorest people (Korzeniewicz, 1999). Thus, Gerring, Thacker, and Alfaro (2012) demonstrate that democracy reduces child mortality and increases school enrollment rate of women. Similarly, Vollmer and Ziegler (2009) find that democracy increases the life expectancy of the population and reduces illiteracy through better redistribution of wealth and improved public services. On the other hand, the degree of income inequality depends on the choice of social policy affected by the nature of the political regime in place. Thus, a transition from dictatorship to democracy promotes the participation of the least favored social classes in political decisions which will allow them to balance income levels. Acemoglu et al. (2015) detect a positive relationship between democracy and raising taxes income, suggesting that a larger amount of tax in democratic society leads to a better redistribution of resources. Furthermore, the degree of trade openness is an important determinant of economic development which can also be influenced by the nature of the political regime. Indeed, dictatorships prefer protectionism because it promotes the interest of a minority close to the government at the expense of the general interest. However, democratization makes trade barriers very difficult to implement (Milner and Kubota, 2005). Thus, democracy results in a widening of the electoral population and forces decision makers to take into account the interest of consumers and adopt market reforms that maximize citizen's well-being. In addition, a solid democratic regime provides better protection of property rights, which in turn results in a significant expansion of research and development activities that promotes innovation and production as well as the bilateral trade (Clarke, 2001). Levchenko (2007) shows that a democratic exporting country brings greater confidence in its products which supports trade with that country. Indeed, before signing contracts of merchandise import with companies of a given country, buyers must have a guarantee that their products will be

delivered on time and with the required quality. Otherwise, they must be assured of the existence of compensation mechanisms and strong protection policies in these countries, which can only be guaranteed by democratic regimes [Berkowitz et al. (2006)]. O'Rourke and Taylor (2006), stipulate that the establishment of democratic elections generally induce a transfer of the political power from the minority elites to the majority workers. This promotes foreign trade since workers prefer to liberalize trade in order to optimize their production and maximize their income. Yu (2010) and Gani and Scrimgeour (2016) also found that democracy supports foreign trade by improving product quality and reducing the exchange costs.

Finally, the nature of the political institutions affects the size of government measured by the extended government spending. Indeed, autocratic governments are more likely to expand the sphere of government to fully immunize their interests and explode government spending and thus taxes that discourage investment and weakens the economic activity. Hausken, Plümper, and Martin (2004) show that the rent-seeking system is less sustainable in democracy and to ensure their political survival, governments tend to be interested in public spending to improve voter's quality of life. While these costs are sometimes more expensive than the bribe paid to decisions makers, but they actively participate in economic development. Gillis (1996) state that democracies are generally stable regimes that do not need to invest heavily in the areas of security and defense. Similarly, Lebovic (2001) confirms that the level of democracy has a negative and significant effect on the budget allocated to the security of a country. This is explained by the fact that democratic governments are more concerned about the population needs and place economic interests and welfare in first priority. Yildirim and Sezgin (2005) and Dizaji, Farzanegan and Naghavi (2016) show that a high level of democracy is negatively correlated with military spending as a percentage of government spending. They stipulate that conflicts between democracies are usually resolved peacefully.

### **3.2. Political instability and Economic Growth**

Political instability is considered by economists as one of the main causes of many country's economics failures. Political instability is a complex process that usually takes many different forms that can interact. Morrison and Stevenson (1972) define political instability as a condition in the national political system where institutionalized authorities are not always respected and the peaceful methods of political power transfer are replaced by violence aiming at changing peoples, policies or sovereignty of the authorities through violations of property or person's integrity. They also identify three main categories of political instability with reference to the trigger source:

- Instability inside government: resulting in political changes attempts within the political elite through coups, political assassinations or conspiracies.

- Communal instability: resulting in political changes attempts initiated by communities, religious, ethnic or regional groups through rebellion or revolt movements.
- Mass instability: resulting in political changes attempts initiated by a group of people or commonly a homogeneous population through strikes or revolts.

Political instability involves short-term macroeconomic decisions unfavorable to development, but also a frequent change of economic policy that increases volatility and negatively affects growth. In addition, it creates a volatile economic environment hostile to investment and productivity (Jong-A-Pin, 2009; Herrala and Turk-ariss, 2016). Similarly, Fosu (2001) identifies a negative impact of political instability on economic growth mainly through its unfavorable impact on the marginal productivity of capital. Berthélemy et al. (2002) find that political instability has a negative impact on the accumulation of private investments. This effect does not hold for public investments because private investment is more responsive to the institutional environment and economic performance while public investment is a hand tool for governments used to palliate the lack of private investment. Otherwise, Roe and Siegel (2011) and Campos, Karanasos and Tan (2012) show that political instability is negatively and significantly correlated with financial development because of the uncertainty that affects banking activities.

#### 4. FINANCIAL LIBERALIZATION, POLITICAL OPENNESS AND ECONOMIC GROWTH: AN EMPERICAL INVESTIGATION

##### **4.1. Financial Liberalization, Democracy, Political Instability and Economic Growth**

###### 4.1.1. *The Growth Model*

This part of the econometric study aims at determining the impact of financial liberalization, political openness and political stability on economic growth. To do so, we used several financial and political openness indicators to test the robustness of our results (the various indexes are explained in the appendix). Then, to specify the empirical model that verifies our assumptions we used previous empirical works while inspired by Barro (1991) and Barro (1998) works on endogenous growth. Thus, we consider the following empirical model:

$$y_{it} = \alpha_{it} + \beta_{it} \begin{cases} FINLIB \\ DEMO \\ POLINSTA \\ POLSTA \\ REGTYPE \\ GOUV \end{cases} + \gamma_{it} X_{it} + \varepsilon_{it},$$

where  $y_{it}$ : the GDP per capita growth rate,  $\alpha$ : constant term,  $\varepsilon_{it}$ : error term with  $\varepsilon_{it} = \mu_i + v_t + \omega_{it}$ . Here  $\mu_i$  is an error term constant in time, it depend only in individual and  $v_t$  the error term that depend only on the period  $t$ , finally  $\omega_{it}$  is the cross error term. FINLIB, DEMO, POLINSTA, POLSTA, REGTYPE and GOVERNANCE measure respectively: financial liberalization, level of democracy, political instability, political stability, political regime type and quality of governance. These variables are introduced separately in the model and explained in the appendix.  $X_{it}$ : Control variable matrix usually used in the literature on growth including investment, foreign trade, inflation, government spending, financial development and population growth (variable's definitions and sources are summarized in the appendix).

The data used in this study cover 108 developing countries between 1984 and 2008 which represent 25 years of observations for each country. The purpose of this choice is to enlarge the study to all the developing countries for which we have an acceptable data length, but always to avoid the effect of the subprime crisis occurred in late 2007 and the Arab spring occurred in the beginning of 2011. In 2013, a country is said to be developing if the gross per capita income does not exceed \$ 11,950 per year. In order to smooth the model, a logarithmic transformation of some variables is performed. In fact, the logarithmic transformation often reduces heteroscedasticity, this is explained by the fact that the log transformation compresses the scales in which variables are measured, thus reducing a tenfold difference between several values in double difference. In our model, the dependent variable is expressed in terms of its past achievements. In this case, the usual techniques of static panel estimation are no longer valid (fixed effect model and random effects model). Thus, we proceed to a dynamic panel estimation with GMM (General Method of Moments) where we faced two econometric techniques: linear or difference GMM estimation (diff-GMM) and system GMM estimation (sys-GMM). However, the linear GMM estimator has asymptotic weaknesses of its precision and its instruments that cause considerable bias in finite samples (Roodman, 2009). Indeed, Blundell and Bond (1998) showed, using Monte Carlo simulations, that system GMM estimator is more powerful than the linear GMM because it allows the simultaneous estimation of the equation in level and the equation in first difference and so generates consistent estimators even for finite samples.

Moreover, the two-step system GMM is more efficient than the one step and especially after the correction of Windmeijer (2005). Indeed this estimation, although robust in theory, tends to produce standard errors that are biased in finite samples. Similar cases have prompted Arellano and Bond (1991) to recommend the one step method for inference. But Windmeijer (2005) developed a method to correct standard



errors in a small sample size and demonstrates that after correction, the two-step estimator is more efficient than the one-step estimator in finite samples. The estimation procedure "xtabond2" on STATA is taking into consideration corrections made by Windmeijer (2005) with standard errors [Roodman (2009)]. This implies that in a fairly large sample in our case 108 countries observed over 25 years, the two-step system GMM estimation procedure with correction of Windmeijer (2005) is best suited given its greater asymptotic efficiency (Allegret and Azzabi, 2012). Also, the two-step system GMM seems to be the most effective technique that can handle endogeneity coming from simultaneous causality between economic growth, financial liberalization, and political openness (Roodman, 2009).

The increasing use of non-stationary macroeconomic data arise the problem of spurious regression. Indeed, if the estimators converge towards their true value, Student statistics associated with them diverge and therefore prohibit any statistical inference (Hurlin and Mignon, 2007). With an unbalanced panel, we stand only to the "Fisher" unit root test on our data. All of the series exhibit a p-value  $<5\%$  and therefore we reject the null hypothesis of non-stationarity and then cointegration tests are unnecessary. Considering the number of economic and institutional variables identified, multicollinearity suspicion must be investigated a bit further in the analysis. This presumption of multicollinearity from economic and institutional variables was examined by calculating the variance inflation factor for each variable. The low level of this indicator obtained for economic variables between 1.05 and 1.20 allowed ruling out the presence of multicollinearity. However, the institutional indicators exhibit a variance inflation factor relatively high of 2.6 for political stability measures to 9 for democracy measures. The question of the critical value of the VIF (Variance Inflation Factor) is much debated in the literature. Indeed, for some, it is recommended not to exceed 10 (Hair et al., 2009) or even 5 (Rogerson, 2001) or 4 (Pan and Jackson, 2008). O'Brien (2007) indicates that there are not well-defined threshold values for VIF, although the conventional value is around 1 and must be wary of values exceeding 2.5. In this case, putting all the institutional indicators together in the model can cause multicollinearity problems because these variables might be highly correlated but there is also the risk of over-identification due to the high number of coefficients to estimate. For these reasons, we introduce institutional indicators one by one in the model. To verify the validity of the instruments we use the Sargan test, also known as the Hansen test or J- test. This test was developed first by Sargan (1975) and improved by Hansen (1982), it is built on the null hypothesis that the error term should not be correlated with all exogenous variables if the instruments are valid. Moreover, it is worth checking the fundamental assumption of non-autocorrelation of second order residue so that the GMM estimator is consistent. Arellano and Bond (1995) suggest an autocorrelation test AR(2), the null hypothesis is the absence of autocorrelation of residuals of second order.

#### 4.1.2. *Interpretation of Results*

The results in Table (3) show that all coefficients of the control variables have the expected sign and are significant at least at 5% in all regressions except for the coefficient of financial development that exhibits a negative sign contrary to what was expected. This negative relationship between financial development and economic growth was often quoted in several previous empirical works. Indeed, Ayadi et al. (2015) found a negative relationship between financial development (credit to the private sector as a percentage of GDP) and economic growth in a sample of MENA countries between 1985 and 2009. They attribute this to poor allocation of resources and a weak banking regulation and supervision in developing countries. Moreover, the instruments used in our regressions are valid because the Hansen/Sargan test does not reject the null hypothesis of the validity of instruments in level and difference ( $p\text{-value} > 0.05$ ). Moreover, we note that there is no second order autocorrelation of the errors of the difference equation (AR2), because the Arellano and Bond autocorrelation test does not reject the null hypothesis of no second order autocorrelation ( $p\text{-value} > 0.05$ ).

Regarding financial liberalization, the regression coefficient related to the de jure measure of capital account opening exhibits a positive sign that is significant at 5%. Furthermore, the de facto measure, although it has a positive sign, is not significant. Our results are similar to those found by Gehringer (2013) and Gazdar and Cherif (2015) who find a more significant impact of the de jure measure on growth than the de facto measure. This can be explained by the fact that the adoption of institutional measures favoring financial liberalization without significant capital movements in the field can support economic growth by sending a positive signal of macroeconomic policy favorable for investors. Thus, financial liberalization seems to have a positive impact on economic growth. This is consistent with economic theory and most empirical results (Kose et al., 2009; Eichengreen, Gullapalli and Panizza, 2011; and Hermes and Lensink, 2008).

Democracy, measured by two different indicators, does not seem to influence economic growth. Even if the coefficients are positive they are not significant at any conventional threshold. This result confirms the ambiguity of the impact of democracy on the economies of developing countries which was recognized in several subsequent empirical works. Indeed, Sirowy and Inkeles (1990), having reviewed 15 empirical works, found that eleven of them conclude to no relationship between democracy and economic growth. Likewise, Przeworski and Limongi (1993), after analyzing 18 empirical works, found twenty-one different results. Thus, eight results support a positive relationship between democracy and economic growth, eight other works found negative results and five other conclude to no relationship between democracy and economic growth. Similarly, Efendic, Pugh and Adnett (2011) found an ambiguous relationship between democracy and economic growth. By pushing the analysis toward, the political regime type does not seem to affect growth. Furthermore, the study of the variable signs suggests that the transition from autocratic to democratic regime reduces

growth and vice versa. Although this result is counter-intuitive it aligns on some earlier work like Antić (2004) who finds that over the last 50 years autocracies have achieved similar even more important growth rates than democracies. In addition, the reality of some countries like China confirms these results.

About political instability measured by two different indexes, it seems to negatively affect growth. Thus, even if the coefficient of the existence of an internal armed conflict does not seem to have a significant impact on growth, it nevertheless exhibits a negative sign. This can be explained by the fact that in the presence of armed conflicts, growth's data remain approximate (that is the case in the Baltic countries and some countries in the Sahel region of Africa). Moreover, the political terror index exerted on the population has a 1% significant negative effect on growth. This is consistent with many previous studies which demonstrate that political instability is not a favorable support for growth. Actually, it installs an under pressure climate that discourages investment and reduces the influx of foreign capital. The study of the impact of political stability confirms this result. Here we focus on the political stability aspect that affects human's physical integrity and freedom and we avoid measures related to the efficiency and longevity of governments that can easily be connected with financial reforms. The two political stability indexes used in this study exhibit a positive and significant sign at 1% threshold. Thus, limiting political imprisonment and respecting the individual's physical integrity induce higher growth rates. Indeed, political stability encourages foreign investment and increase tourism influx. In addition, as demonstrated by Dutta and Roy (2011), political stability attracts "brain immigration".

Finally, the index of a good political governance has the expected positive sign but it is not significant. This can be explained by the legal and institutional tissue deficiency and the expansion of corruption in developing countries. In addition, the index of good governance and the GDP growth rate per capita are highly correlated which can lead to biased estimates (De Soysa and Bussmann, 2006). Moreover, this result should be taken with caution because of the nature of the index that is built by experts of PRS group (Political Risk Services) for international investors and does not take into account population interest. Moreover, its construction method has significant errors. Thus Razafindrakoto and Roubaud (2014) postulate that the composite indicator of the ICRG gives equal weight to subjective perceptions of the components of political risk, on one hand, and objective indicators of economic and financial risk, on the other hand. This can induce significant bias in estimation to the extent that an expert can underestimate a component of political governance such as corruption when a country has a high growth rate.

## **4.2. Transmission Channels**

### *4.2.1. The Transmission Mechanism Model*

This part of the econometric study aims at determining the channels through which

financial integration, democracy and political instability influence growth. Here we adopt a transversal panel analysis between 1984 and 2008. Indeed, since there are no more lagged dependent variables in the panel it is no longer necessary to study the transmission channels using the dynamic panel technique. The model adopted is the following:

$$\begin{cases} linvest_{it} \\ lgov_{it} \\ lsec_{it} \\ lprivy_{it} \\ linfl_{it} \\ lopen_{it} \end{cases} = \alpha + \beta_1(fh_{it}) + \beta_2(kaopen_{it}) + \beta_3(gd\_ptsa_{it}) + \beta_4(chga\_hinst_{it}) + \varepsilon_{it}.$$

In this equation, each of the dependent variables (definitions and sources in the appendix) is estimated in a separate equation in function of  $fh$ ,  $kaopen$ ,  $gd\_ptsa$  and  $chga\_hinst$  which describe respectively: level of democracy, de jure financial liberalization, political instability, and political regime type. Nevertheless, aware of the existence of endogeneity between some variables and the presence of heteroscedasticity and possible autocorrelation of residuals in our data, we use different panel testing to determine the most suitable model structure for our data (Breush-Pagan homogeneity test, Hausman specification test, autocorrelation and heteroscedasticity test on residuals). Here, with presence of residual heteroscedasticity and autocorrelation, the model is estimated by GLS (generalized least squares).

#### 4.2.2. Interpretation of Results

##### *Financial liberalization*

An analysis of the transmission channels from the table (4) shows that financial liberalization acts favorably on the investment. Indeed, and according to the work of Fry (1995), domestic investment requires capital accumulation mainly from private savings by households and local companies. This is insufficient in most developing countries and a reallocation of global savings stimulates investment and consumption in developing countries. Thus, access to foreign capital reduce the liquidity constraint of domestic firms and allows to exploit the growth potential by investing in profitable projects beyond what would be allowed by the only saving of residents. Similarly, in a liberalized financial market, lower cost of capital induced by the decline in risk premium led to a boom in domestic investment.

Moreover, the opening of the capital account would have a positive and significant impact on trade openness. This is done mainly through a transfer of technological and managerial know-how and promoting specialization. Indeed, the expansion of foreign trade in developing countries requires increasing domestic production through the introduction of advanced management techniques and processes available only in developed countries (Borensztein, De Gregorio and Lee, 1998). Furthermore, the

opening of the capital account, through the establishment of interregional insurance and adjustment of savings, promotes specialization according to the Ricardian theory which states that countries should specialize in sectors according to their comparative advantages. Thus, in the context of international trade, these countries will increase their wealth and accelerate their development.

On the other hand, there is a negative relationship between capital account openness and inflation. This means that opening the capital account reduces the excessive price increases. In accordance with the pioneering work of McKinnon (1973) and Shaw (1973), financial repression is synonymous with inflation because of the setting of interest rates. Thus, capping interest rates at very low levels, certainly allows the state to finance itself at low cost and helps stimulate the credits in a context of consumption crisis, however, the abundance of credit causes inflation in the form of swelling of the money supply. Moreover, a rise in interest rates increases the cost of productive capital and leads to an increase in the general price level (cost inflation) and a fall in investment and the real demand (Taylor, 1983; Van Wijnbergen, 1983). Thus, liberalization of interest rates is the best solution to deal with inflation. In other words, interest rates should fluctuate based on the scarcity of capital and the risk of the borrower.

Besides, our work confirms the positive relationship between capital account openness and financial development. Indeed, financial integration through the opening of the barriers to foreign banks will have several beneficial effects on the financial sector through the introduction of new services and ways of financing and increased competition among local banks and financial establishments. In addition to a highly efficient procedure for collection of information on firms and control of leaders.

Furthermore, the opening of capital account seems to have a positive and significant impact on the quality of human capital. Thus, a higher rate of financial openness produces a large enrollment in secondary school. Indeed, to effectively operate the new means of production imported from other developed countries, the government must invest in human capital formation, which results in higher enrollment rates.

Finally, financial liberalization does not appear to have a significant impact on government spending.

#### *Democracy*

Democracy, measured by the index of democratic practices (FH), has no impact on investment, but it seems to promote foreign trade. Indeed, political integration induces reforms for more economic cooperation that can promote foreign trade. Here we can mention some examples like the regulation of monopolies in the European Union and the creation of economic and trade exchange zones such as NAFTA and MERCOSUR. Furthermore, a positive correlation was recorded between democracy and inflation suggesting that democratic regimes in developing countries are not good support for macroeconomic stability. These results are consistent with those found by Bates (2007), which show that the introduction of competition policy in developing countries does not improve macroeconomic conditions in Africa probably because the establishment of

wise political reforms favorable to macroeconomic stability takes a long time. Similarly, Brender and Drazen (2005) demonstrate that political cycles in developing countries are more volatile than those in developed countries, thus multiplying governmental instability which generally leads to macroeconomic instability and a surge in inflation. In addition, on a sample of 62 developing countries and during the period between 1960 and 2003, Mijiyawa (2008) shows a positive relationship between democracy and inflation. This is explained by the strategy of money supply increase usually adopted by democratic regimes in the absence of a more effective macroeconomic stabilization policy, but also a difficulty to implement economic reforms because of the political polarization. Moreover, democracy seems to have a positive impact on financial development. This is explained by a higher quality of supervision and control of leaders in democracies that ensure property rights (Acemoglu et al., 2005) and fight against the expropriation of banks and other financial institutions by a political elite (LaPorta et al., 1998). Similarly, democracy seems to have a positive impact on human capital. This is consistent with most previous empirical studies which prove that a high level of democracy leads to more investments in human capital (Baum and Lake, 2003). Similarly, Tavarez and Wacziarg (2001) demonstrate that democracy values human resources and leads to a better allocation of resources to the most efficient teaching sector. Finally, democracy appears to reduce government spending. This is explained by the fact that a democratic regime produces a very frequent change of people at the top of the state and thus, prevents the political elite to benefit from a pension system financed by corruption. In addition, a democratic regime is generally a stable regime that does not need to invest heavily in the areas of security and defense.

#### *Regime Types*

An analysis of political regime types in developing countries shows that the transition from a democracy to an authoritarian regime led to a significant decline in investment. This is explained by the fact that authoritarian regimes generally adopt unfavorable taxation policies to private investment (Li, 2006). Moreover, we detected a significant positive correlation between the dictatorship and the enrollment rate in secondary education. This unexpected result can be explained by the fact that authoritarian regimes typically use the education system to convey their ideology (leader cult, learning the values of the regime, orientation of the history, hate of some foreign countries or racial hatred).

#### *Political Instability*

Our results show that political instability negatively affects investment. Indeed, it installs a heavy atmosphere that manifests through very frequent changes of decision makers and macroeconomic policies resulting in high volatility which increases the risk and negatively affects investment decisions (Aisen and Veiga, 2013). Moreover, investment is not attractive in developing countries with high levels of political instability and where ownership is usually not respected and the expropriation rate is

very high (Azzimonti and Sarte, 2007). Elsewhere, there are negative correlations between political instability and trade openness. Indeed, political instability and the uncertainty negatively affect domestic production leading to lower imports. In fact, when importers are risk averse, increasing uncertainty about their supplies related to political instability in some countries produce a decline in exports in these countries and an increase in other countries more politically stable (Wolak and Kolstad, 1991). From another point of view, uncertainty about the growth potential of countries subject to political instability lowers national income and ability to pay for imports, reduces the flow of exports to these countries. Furthermore, growing political instability isolates policymakers and generally precludes the conclusion of trade agreements with other countries (Morrow, Siverson and Tabares, 1998).

Otherwise, political instability increases the general level of prices. Indeed, increasing political instability and uncertainty of the government to stay in power led them to not foresee reforms of the tax system of which they may never see the benefits on one hand and pushes them to maximize their income through taxation policy and seigniorage. This tax, also called inflation tax is a source of financing in many developing countries which commonly produces an increase in price levels (Cukierman et al., 1992).

Finally, it seems that political instability does not affect financial development, secondary school enrollment, and government spending.

#### *Institutional Quality*

Institutional quality positively affects investment. Indeed, a developing country with a relatively developed institutional status guarantees to entrepreneurs a suitable environment for investment by protecting property rights and fighting against corruption. Moreover, given that most capital flows from developed countries, multinational companies prefer to invest in countries whose institutional framework is closest to the country of origin (Ali, Fiess and Macdonald, 2010). In addition, we find that institutional quality reduces inflation to the extent that a developed institutional and legal environment led to the adoption of wise macroeconomic policies that promote price stability. Moreover, institutional quality acts favorably on financial development, since it guarantees property rights and enforcement of contractual terms which attracts more foreign banks and encourages them to settle in these countries. Finally, we find that good institutional quality promotes the development of human capital. This result is explained by a virtuous circle since it is widely recognized that an educated population calls for more transparency and justice, which allows building dynamic legal institutions (Alesina and Perrotti, 1996). Similarly, it has been shown that a high level of education in a country fights effectively against corruption (Rauch and Evans, 2000). In addition, effective control of corruption and high protection of property rights combined with an efficient judicial system is an engine of cultural, technological and scientific innovation (Tebaldi and Elmslie, 2013).

## 5. SUMMARY AND CONCLUSION

In a highly integrated global environment, essentially marked by a succession of economic, financial and political contagious crises, we tried at first to empirically determine the impact of different forms of financial and political openings on GDP per capita growth. Thus, by using the latest innovations in panel econometrics and on a sample of 108 developing countries, we have demonstrated that financial liberalization has a positive direct impact on growth. However, democracy and regime type do not seem to directly affect growth in developing countries. Elsewhere, political instability has a direct negative impact on growth as predicted. This result is confirmed by the significant positive impact of political stability on growth. Secondly, we tried to identify the channels through which financial liberalization, democracy, and political instability affect growth. Our results demonstrate that financial liberalization in addition to its direct impact on growth, affects positively investment, foreign trade, and macroeconomic stability through inflation reduction. Financial integration led to financial development and human capital improvement. Elsewhere, democracy, even if it has no significant direct impact on growth, it positively affects it indirectly through the trade channel, but also financial expansion and human capital reinforcement. However, democracy slows growth by increasing inflation. Indeed, the political cycles in developing countries are more volatile than those in developed countries, thus multiplying the governmental instability which generally leads to macroeconomic instability and a surge in inflation. Finally, political instability negatively affects economic development directly, but also indirectly. Indeed, political instability is generally negatively correlated with investment but also production and therefore foreign trade. In addition, our results establish a positive correlation between political instability and inflation.

Finally, our study on a wide sample of developing countries has resulted in different and significant statistical results. However, it is important to point that institutional measures of financial and political openness in a country level do not completely reflect the real impact of these complex processes on growth. Thus, it is necessary to refine further the analysis by decomposing the different processes and to adapt it to the sectoral or even to the enterprise's scale. In addition, our analysis uses an average growth index. However, the gains in terms of growth are generally uneven distributed and benefit to the richest category of the population (Das and Mohapatra, 2003). It is within this framework, that a study of the impact of financial and political openness on the reduction of income inequalities must be the subject of more advanced empirical investigations in future works.



## APPENDIX

**Table A1.** 108 Developing Countries

<b>Europe</b>		<b>MENA Country</b>
Albania	Cape Verde	Algeria
Armenia	Central African Republic	Egypt
Azerbaijan	Chad	Iran
Belarus	Comoros	Iraq
Bulgaria	Congo	Jordan
Georgia	Congo, Democratic Republic	Lebanon
Latvia	Cote d'Ivoire	Libya
Lithuania	Djibouti	Morocco
Macedonia	Equatorial Guinea	Syria
Moldova	Ethiopia (1993-)	Tunisia
Romania	Gabon	Turkey
Russia	Gambia	Yemen
Ukraine	Ghana	
	Guinea	<b>Latin America</b>
<b>Asia</b>	Guinea-Bissau	Argentina
Bangladesh	Kenya	Bolivia
Cambodia	Lesotho	Brazil
China	Liberia	Chile
India	Madagascar	Colombia
Indonesia	Malawi	Costa Rica
Malaysia	Mali	Dominican Republic
Maldives	Mauritania	Ecuador
Mongolia	Mauritius	El Salvador
Nepal	Mozambique	Guatemala
Pakistan (1972-)	Namibia	Guyana
Papua New Guinea	Niger	Haiti
Philippines	Nigeria	Honduras
Sri Lanka	Rwanda	Jamaica
Thailand	Senegal	Mexico
Turkmenistan	Seychelles	Nicaragua
Uzbekistan	Sierra Leone	Panama
Vietnam	Sudan	Paraguay
	Swaziland	Peru
<b>Africa</b>	Tanzania	Uruguay
Angola	Togo	Venezuela
Benin	Uganda	<b>Oceania</b>
Botswana	Zambia	Fiji
Burkina Faso	Zimbabwe	
Burundi		
Cameroon		

**Table A2.** Variables used in the Model

Variables	Measures	Sources
Dependent variable		
Growth	GDP per capita growth (annual %)	WDI 2014
Control variables		
Investment	linvest: logarithm of gross capital formation (% of GDP)	WDI 2014
Foreign trade	lopen: logarithm (of imports of goods and services (% of GDP)+Exports of goods and services (% of GDP))	WDI 2014
Financial development	lprivy: logarithm of domestic credit to private sector (% of GDP)	WDI 2014
Government spending	lgov: logarithm of general government final consumption expenditure (% of GDP)	WDI 2014
Inflation	linfl: logarithm of inflation, consumer prices (annual %)	WDI 2014
Human capital	lsec: logarithm of school enrollment, secondary (% gross)	WDI 2014
Population	popg : Population growth (annual %)	WDI 2014
Financial and political openness indicators		
De Jure financial liberalization	Kaopen (institutional measure of capital account openness)	Chin and Ito database (2008)
De facto financial liberalization	LMF (Total foreign assets and liabilities)	Lane et Milesi-Ferretti (2007) database; [External Wealth of Nations]
Democracy	Polity 2	polity IV project by Marshall and al (2007)
	FH	Freedom House database (2014)
Political regime type	LIEC	Beck et al. Database (2000) updated (2012); [Database of Political Institutions 2012]
	Chga_hinst	Cheibub, Ghandi and Vreeland database (2010)
Political instability	Gd_ptsa	Gibney et al. database (2012)
	Ucdp_loc	Gleditsh et al. Database (2002) Version 2 (2009)
Political stability	Ciri_polpris	David L.Cingranelli; David L. Richards and K. Chad Clay database (CIRI-2014) Version 04.14
	Ciri_physint	David L.Cingranelli; David L. Richards and K. Chad Clay database (CIRI-2014) Version 04.14

**Table A3. Estimation using System GMM with Two Steps with Windmeijer (2005) Standard Error Correction**

Variables	Code	Economic growth measured by the GDP per capita growth							Political instability	Political stability	Institutional quality		
		First estimation	Capital account Openness	Democracy	Regime types	Political instability	Political stability	Institutional quality					
Control variables													
	l1_gdpcc	0.117783***	0.0767254*	0.1163884**	0.1174779**	0.1088104**	0.1319909**	0.1170453**	0.1109547*	0.0489298	0.1349898***	0.1266087**	0.1247536
	invest	4.043739***	4.537762***	4.007245***	4.217292***	4.350989***	3.090339***	4.055507***	3.785647***	4.855815***	3.480606***	3.402939***	4.01437***
	low	1.567615***	1.765195***	1.571051***	1.5214818***	1.468561***	1.352187***	1.544034***	1.310613***	1.325534***	1.510247***	1.585801***	1.313739***
	inifl	-0.6340046***	-0.606010***	-0.628465***	-0.638375***	-0.66300***	-0.522844***	-0.638645***	-0.769277***	-0.661747***	-0.564451***	-0.581135***	-0.5508577***
	lgov	-5.401744***	-5.308151***	-5.41088***	-5.318768***	-5.445117***	-4.429656***	-5.363112***	-6.194024***	-7.544802***	-5.021969***	-5.038498***	-4.343521**
	lprivy	-2.550276***	-3.066221***	-2.559356***	-2.573754***	-2.778251***	-1.87882***	-2.536437***	-2.866507***	-2.936695***	-2.225673***	-2.171011***	-1.707887**
Constant	popg	-0.8203691***	-0.974545***	-0.813487***	-0.858634***	-0.880841***	-0.8158077**	-0.813463***	-0.8113593**	-0.930550***	-0.5575936	-0.539682	-1.031711
	ete	8.074059*	7.667028	8.184309*	7.6145684*	7.789875	7.405678	7.719027*	14.82276***	13.86834#	6.098754	6.648416	3.924465***
Capital account openness	Kaopen	-	0.7148531**	-	-	-	-	-	-	-	-	-	-
Democracy	mf	-	-	0.3823356	-	-	-	-	-	-	-	-	-
	p2	-	-	-	0.0282193	-	-	-	-	-	-	-	-
Political regime types	FH	-	-	-	-	0.1346399	-	-	-	-	-	-	-
	LJEC	-	-	-	-	-	-0.072228	-	-	-	-	-	-
Political instability	chga_hinst	-	-	-	-	-	-	0.1076164	-	-	-	-	-
	gd_pisa	-	-	-	-	-	-	-	-0.56528***	-	-	-	-
Political stability	ucdp_loc	-	-	-	-	-	-	-	-	-0.5493873	-	-	-
	curi_physint	-	-	-	-	-	-	-	-	-	0.3108071**	-	-
	curi_polpris	-	-	-	-	-	-	-	-	-	-	0.6013597**	-
Institutional quality	icrg	-	-	-	-	-	-	-	-	-	-	-	0.6863488
Countries involved	N	100	100	100	99	98	95	100	99	96	100	100	81
Sample size	i	1815	1774	1850	1749	1759	1737	1812	1592	1429	1762	1764	1447
Hansen J test	J-Test	0.2896	0.3539	0.2963	0.3566	0.3641	0.4819	0.2806	0.4322	0.2028	0.2725	0.2918	0.1272
AR(2) autocorrelation test	AR(2)_Test	0.3696	0.2801	0.3661	0.3639	0.3443	0.1096	0.3677	0.3551	0.3637	0.6132	0.6777	0.7368

Note: (\*\*\*) Significant at 1% level; (\*\*) Significant at 5% level; (\*) Significant at 10% level.

**Table A4.** Financial and Political Openness: Transmission Channel

Variables	Investment	Trade openness	Inflation	Financial development	Human capital	Gouvernement spending
code	linvest	louv	linfl	lprivy	lsec	lgov
cte	2.911212***	3.905378***	2.0584***	2.818851***	3.502628***	13.71003***
Financial openness (Kaopen)	0.0096337*	0.060662***	-0.1849***	0.022932***	0.035202***	0.0811308
Democracy(FH)	0.002789	0.015130***	0.03510**	0.010448*	0.036272***	-0.070973**
Political regime types (chga_hinst)	-0.0109759*	-0.0022536	0.0249272	0.0105882	0.0112575*	-0.067038
Political instability (gd_ptsa)	-0.012602***	-0.12242***	0.1034***	-0.0027953	0.0031463	-0.0164238
Institutional quality (icrg)	0.3260883***	0.110884	-0.7974***	0.384480***	0.224928***	0.6672608
Countries involved	83	84	82	84	84	83
Sample size	1647	1659	1487	1654	1225	1642
Breusch Pagan test	0	0	0	0	0	0
Hausman test	0.0462	0.0001	0.0053	0	0	0
Wald test (H)	0	0	0	0	0	0
Woold. test (corr)	0	0.5019	0	0	0	0
Used model	GLS(H/corr)	GLS(H)	GLS(H/corr)	GLS(H/corr)	GLS(H/corr)	GLS(H/corr)

Notes: GLS (H): generalized least squares with correction of residual heteroscedasticity, GLS (H/corr): generalized least squares with correction of residual heteroscedasticity and autocorrelation.

This econometric approach is efficient in dealing with potential heteroscedasticity and/or autocorrelation across panel but it does not allow to calculate an R-squared. Specifically, this evaluation tools lose some of its proprieties, particularly the fact that R-squared should be bounded between zero and one, making it less useful for interpretation. For more details see: (<https://www.stata.com/support/faqs/statistics/r-squared-after-xtgls/>). (\*\*\*) Significant at 1% level; (\*\*) Significant at 5% level; (\*) Significant at 10% level.

## REFERENCES

- Acemoglu, D. and S. Johnson (2005), "Unbundling Institutions," *Journal of Political Economy*, 113(5), 949-995.
- Acemoglu, D., S. Naidu, P. Restrepo and J.A. Robinson (2015), "Democracy, Redistribution, and Inequality," in Atkinson, A.B. and F. Bourguignon, eds., *Handbook of Income Distribution*, Elsevier.
- Adeleke, A. (2014), "FDI Growth Nexus in Africa: Does Governance Matter?" *Journal of Economic Development*, 39(1), 111-135.
- Aisen, A. and F.J. Veiga (2013), "How Does Political Instability Affect Economic Growth?" *European Journal of Political Economy*, 29, 151-167.
- Alesina, A. and R. Perotti (1996), "Income Distribution, Political Instability, and Investment," *European Economic Review*, 40(6), 1203-1228.
- Ali, F.A., N. Fiess, and R. MacDonald (2010), "Do Institutions Matter for Foreign Direct Investment?" *Open Economies Review*, 21(2), 201-219.
- Allegret, J.P. and S. Azzabi (2012), "Développement Financier, Croissance de Long Terme et Effets de Seuil," *Panoeconomicus*, 59, 553-581.
- Antić, M. (2004), "Democracy versus Dictatorship: The Influence of Political Regime on GDP per Capita Growth," *Economic Review*, 55(9-10), 773-803.
- Arellano, M. and S.R. Bond (1991), "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations," *Review of Economic Studies*, 58, 277-297.
- Arellano, M. and O. Bover (1995), "Another Look at the Instrumental Variable Estimation of Error-components Models," *Journal of Econometrics*, 68(1), 29-51.
- Awan, R.U., R. Munir, Z. Hussain and F. Sher (2010), "Rate of Interest, Financial Liberalization and Domestic Savings Behavior in Pakistan," *International Journal of Economics and Finance*, 2(4), 75-81.
- Ayadi, R., E. Arbak, S.B. Naceur and W.P.D. Groen (2015), "Determinants of Financial Development Across the Mediterranean," in Ayadi, R., M. Dabrowski, and L.D. Wulf, eds., *Economic and Social Development of the Southern and Eastern Mediterranean Countries*, Springer International Publishing.
- Azzimonti, M. and P.D.G. Sarte (2007) "Barriers to Foreign Direct Investment under Political Instability," *FRB Richmond Economic Quarterly*, 93(3), 287-315.
- Barro, R.J. (1991), "Economic Growth in a Cross Section of Countries," *Quarterly Journal of Economics*, 106(2), 407-443.
- \_\_\_\_\_ (1998), *Determinants of Economic Growth: A Cross-country Empirical Study*, Boston: MIT Press.
- Bates, R. (2007), *The Political Economy of Economic Growth in Africa, 1960-2000*, Cambridge: Cambridge University Press.
- Baum, M.A. and D.A. Lake (2003), "The Political Economy of Growth: Democracy and Human Capital," *American Journal of Political Science*, 47(2), 333-347.
- Berkowitz, D., J. Moenius and K. Pistor (2006), "Trade, Law, and Product Complexity,"

- Review of Economics and Statistics*, 88(2), 363-373.
- Berthélemy, J.C., C. Kauffmann, L. Renard and L. Wegner (2002), "Political Instability, Political Regimes and Economic Performance in African Countries," Unpublished Paper Prepared for African Development Bank, African Economic Outlook.
- Blanco, L. and R. Grier (2009), "Long Live Democracy: The Determinants of Political Instability in Latin America," *Journal of Development Studies*, 45(1), 76-95.
- Blundell, R. and S. Bond (1998), "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models," *Journal of Econometrics*, 87(1), 115-143.
- Borensztein, E., J. De Gregorio and J.W. Lee (1998), "How Does Foreign Direct Investment affect Economic Growth?" *Journal of International Economics*, 45(1), 115-135.
- Brender, A. and A. Drazen (2005), "Political Budget Cycles in New versus Established Democracies," *Journal of Monetary Economics*, 52(7), 1271-1295.
- Bruno, V. and R. Hauswald (2014). "The Real Effect of Foreign Banks," *Review of Finance*, 18(5), 1683-1716.
- Campos, N.F., M.G. Karanasos and B. Tan (2012), "Two to Tangle: Financial Development, Political Instability and Economic Growth in Argentina," *Journal of Banking and Finance*, 36(1), 290-304.
- Caprio, G., and P. Honohan (1999), "Restoring Banking Stability: Beyond Supervised Capital Requirements," *Journal of Economic Perspectives*, 13(4), 43-64.
- Chou, Y.K. (2007), "Modeling Financial Innovation and Economic Growth: Why the Financial Sector Matters to the Real Economy," *Journal of Economic Education*, 38(1), 78-90.
- Clarke, G.R.G. (2001), "How Institutional Quality and Economic Factors Impact Technological Deepening in Developing Countries," *Journal of International Development*, 13(8), 1097-1118.
- Cukierman, A., S. Edwards and G. Tabellini (1992), "Seigniorage and Political Instability," *American Economic Review*, 82(3), 537-555.
- Das, M. and S. Mohapatra (2003), "Income Inequality: The Aftermath of Stock Market Liberalization in Emerging Markets," *Journal of Empirical Finance*, 10(1-2), 217-248.
- De Haan, J. and C.L.J. Siermann (1996), "New Evidence on the Relationship between Democracy and Economic Growth," *Public Choice*, 86(1/2), 175-198.
- De Soysa, I., M. Bussmann, (2006), "How Taxing is Trade? Globalization, State Capacity, & Civil War, 1960-99". Conference paper. University of Konstanz presented at Polarization and Conflict Project, December.
- Dizaji, S.F., M.R. Farzanegan and A. Naghavi (2016), "Political Institutions and Government Spending Behavior: Theory and Evidence from Iran," *International Tax and Public Finance*, 23(3), 522-549.
- Drury, A.C., J. Kriekhaus and M. Lusztig (2006), "Corruption, Democracy, and Economic Growth," *International Political Science Review*, 27(2), 121-136.
- Dutta, N. (2011), "Do Potential Skilled Emigrants Care About Political Stability at

- Home?" *Review of Development Economics*, 15, 442-457.
- Efendic, A., G. Pugh and N. Adnett (2011), "Institutions and Economic Performance: A Meta-regression Analysis," *European Journal of Political Economy*, 27(3), 586-599.
- Egbuna, N.E., E. Oniwoduokit, K. Mansaray, M. Umo and A. Adenekan (2013), "Capital Account Liberalization and Growth in the WAMZ: An Empirical Analysis," *International Journal of Economics and Finance*, 5(12), 40-62.
- Eichengreen, B., R. Gullapalli and U. Panizza (2011), "Capital Account Liberalization, Financial Development and Industry Growth: A Synthetic View," *Journal of International Money and Finance*, 30(6), 1090-1106.
- Eichengreen, B. and A. Rose (2014), "Capital Controls in the 21st Century," *Journal of International Money and Finance*, 48, 1-16.
- Fosu, A.K. (2001), "Economic Fluctuations and Growth in Sub-Saharan Africa: The Importance of Import Instability," *Journal of Development Studies*, 37(3), 71-85.
- Fry, M.J. (1995), *Money, Interest, and Banking in Economic Development*, Baltimore: Johns Hopkins University Press.
- Galbis, V. (1977), "Financial Intermediation and Economic Growth in Less-developed Countries: A Theoretical Approach," *Journal of Development Studies*, 13(2), 58-72.
- Gani, A., and F. Scrimgeour (2016), "New Zealand's Trade with Asia and the Role of Good Governance," *International Review of Economics and Finance*, 42, 36-53.
- Galbis, V. (1977) "Financial Intermediation and Economic Growth in Less-developed Countries: A Theoretical Approach," *Journal of Development Studies*, 13(2): 58-72.
- Gazdar, K. and M. Cherif (2015), "Institutions and the Finance-growth Nexus: Empirical Evidence from MENA Countries," *Borsa Istanbul Review*, 15(3), 137-160.
- Gehring, A. (2013), "Growth, Productivity and Capital Accumulation: The Effects of Financial Liberalization in the Case of European Integration," *International Review of Economics and Finance*, 25, 291-309.
- Gerring, J., S.C. Thacker and R. Alfaro (2012), "Democracy and Human Development," *Journal of Politics*, 74(1), 1-17.
- Gillis, M., (1996), *Economics of Development*, 4th eds. New York: W.W. Norton.
- Hair J.F., W.C. Black, J.B. Babin and R.E. Anderson (2009), *Multivariate Data Analysis*, 7th eds, NJ: Prentice Hall.
- Hansen, L.P. (1982), "Large Sample Properties of Generalized Method of Moments Estimators," *Econometrica*, 50(4), 1029-1054.
- Hausken, K., C.W. Martin and T. Plümer (2004), "Government Spending and Taxation in Democracies and Autocracies," *Constitutional Political Economy*, 15(3), 239-259.
- Henry, P.B. (2000), "Do Stock Market Liberalizations cause Investment Booms?" *Journal of Financial Economics*, 58(1-2), 301-334.
- \_\_\_\_\_ (2007), "Capital Account Liberalization: Theory, Evidence, and Speculation," *Journal of Economic Literature*, 45(4), 887-935.
- Hermes, N. and R. Lensink (2008), "Does Financial Liberalization Influence Saving, Investment and Economic Growth? Evidence From 25 Emerging Market Economies, 1973-96", in Khasnabis B.G. and G. Mavrotas, eds., *Financial Development*,

- Institutions, Growth and Poverty Reduction*, UK: Palgrave Macmillan.
- Herrala, R. and R.T. Ariss (2016), "Capital Accumulation in a Politically Unstable Region," *Journal of International Money and Finance*, 64, 1-15.
- Hurlin, C. and V. Mignon (2008), "Panel-Data Cointegration Tests: A Survey," *Economie and Prévision*, 180-181, 241-265.
- Imbs, J. (2006), "The Real Effects of Financial Integration," *Journal of International Economics*, 68(2), 296-324.
- Islamaj, E. (2014), "Industrial Specialization, Financial Integration and International Consumption Risk Sharing," *B.E. Journal of Macroeconomics*, 14(1), 1-33.
- Jeanne, O. and P.O. Gourinchas (2009), "Capital Mobility and Reform," 2009 Meeting Paper No. 107, Society for Economic Dynamics.
- Jensen, N.M. (2003), "Democratic Governance and Multinational Corporations: Political Regimes and Inflows of Foreign Direct Investment," *International Organization*, 57(3), 587-616.
- Jong-A-Pin, R. (2009), "On the Measurement of Political Instability and its Impact on Economic Growth," *European Journal of Political Economy*, 25(1), 15-29.
- Kalemli-Ozcan, S., B.E. Sørensen and O. Yosha (2003), "Risk Sharing and Industrial Specialization: Regional and International Evidence," *American Economic Review*, 93(3), 903-918.
- Kapur, B.K. (1976), "Alternative Stabilization Policies for Less-developed Economies," *Journal of Political Economy*, 84(4), 777-795.
- Keller, W. (2010), "International Trade, Foreign Direct Investment, and Technology Spillovers," *Handbook of the Economics of Innovation*, 2, 793-829.
- Koo, J., and S. Shin (2004), "Financial Liberalization and Corporate Investments: Evidence from Korean Firm Data," *Asian Economic Journal*, 18(3), 277-292.
- Korzeniewicz, R.P. (1999), "Review of Review of Cultures of Politics/Politics of Cultures: Re-Visioning Latin American Social Movements, by S.E. Alvarez, E. Dagnino and A. Escobar," *Journal of Interamerican Studies and World Affairs*, 41(3), 159-164.
- Kose, M., E. Prasad and M.E. Terrones (2009), "Does Openness to International Financial Flows Raise Productivity Growth?" *Journal of International Money and Finance*, 28(4), 554-580.
- Kose, M., E. Prasad, K. Rogoff and S.J. Wei (2009), "Financial Globalization: A Reappraisal" *IMF Staff Papers*, 56(1), 8-62.
- Laeven, L. (2003), "Does Financial Liberalization Reduce Financing Constraints?" *Financial Management*, 32(1), 5-34.
- LaPorta, R., F.L. De Silanes, A. Shleifer and R. Vishny (1998), "Law and Finance," *Journal of Political Economy*, 106(6), 1113-1155.
- Lebovic, J.H. (2001), "Spending Priorities and Democratic Rule in Latin America," *Journal of Conflict Resolution*, 45(4), 427-452.
- Levchenko, A.A. (2007), "Institutional Quality and International Trade," *Review of Economic Studies*, 74(3), 791-819.



- Li, Q. (2006), "Democracy, Autocracy, and Tax Incentives to Foreign Direct Investors: A Cross-National Analysis," *Journal of Politics*, 68(1), 62-74.
- Lipset, S.M. (1959), "Some Social Requisites of Democracy: Economic Development and Political Legitimacy," *American Political Science Review*, 53(1), 69-105.
- \_\_\_\_\_ (1960), *Political Man: The Social bases of Politics*. Baltimore, Johns Hopkins University Press.
- Mathieson, D.J. (1980), "Financial Reform and Stabilization Policy in a Developing Economy," *Journal of Development Economics*, 7(3), 359-395.
- McKinnon, R.I. (2001), *Money and Capital in Economic Development*, Brookings Institution.
- Mijiyawa, A. (2008). "Inflation and Democracy in Former Extractive Colonies Analysis with a New Instrumental Variable," Proceedings of the German Development Economics Conference, Zurich 2008 No. 28.
- Milner, H.V. and K. Kubota (2005), "Why the Move to Free Trade? Democracy and Trade Policy in the Developing Countries," *International Organization*, 59(1), 107-143.
- Mimir, Y. (2016), "On International Consumption Risk Sharing, Financial Integration and Financial Development," *Emerging Markets Finance and Trade*, 52(5), 1241-1258.
- Razafindrakoto M., and F. Roubaud (2017), "Peut-on Se Fier Aux Bases de Données Internationales Sur La Gouvernance? Une Confrontation Entre Enquêtes-Experts et Enquêtes-Ménages En Afrique Subsaharienne." Ined-Institut National D'études Démographiques.
- Morrison, D.G., and H.M. Stevenson (1972), "Cultural Pluralism, Modernization, and Conflict: An Empirical Analysis of Sources of Political Instability in African Nations," *Canadian Journal of Political Science*, 5(1), 82-103.
- Morrow, J.D., R.M. Siverson and T.E. Tabares (1998), "The Political Determinants of International Trade: The Major Powers, 1907-90," *American Political Science Review*, 92(3), 649-661.
- O'Brien, R.M. (2007), "A Caution Regarding Rules of Thumb for Variance Inflation Factors," *Quality and Quantity*, 41(5), 673-690.
- O'Rourke, K.H. and A.M. Taylor (2006), "Democracy and Protectionism", in Hatton, T.J., K.H. O'Rourke and A.M. Taylor, eds., *The New Comparative Economic History: Essays in Honor of Jeffrey G. Williamson*. MIT Press.
- O'Toole, C.M. (2014), "Does Financial Liberalisation Improve Access to Investment Finance in Developing Countries?" *Journal of Globalization and Development*, 5(1), 41-74.
- Pan, Y. and R.T. Jackson (2008), "Ethnic Difference in the Relationship between Acute Inflammation and Serum Ferritin in US Adult Males," *Epidemiology and Infection*, 136(3), 421-431.
- Przeworski, A. and F. Limongi (1993), "Political Regimes and Economic Growth," *Journal of Economic Perspectives*, 7(3), 51-69.

- Rauch, J.E., and P.B. Evans (2000), "Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries," *Journal of Public Economics*, 75(1), 49-71.
- Roe, M.J. and J.I. Siegel (2011), "Political Instability: Effects on Financial Development, Roots in the Severity of Economic Inequality," *Journal of Comparative Economics*, 39(3), 279-309.
- Rogerson, P. (2001), *Statistical Methods for Geography*, London: SAGE Publications.
- Roodman, D. (2009), "How to Do Xtabond2: An Introduction to Difference and System GMM in Stata," *Stata Journal*, 9(1), 86-136.
- Sargan, J.D. (1958), "The Estimation of Economic Relationships using Instrumental Variables," *Econometrica*, 26(3), 393-415.
- \_\_\_\_\_. (1975), "Asymptotic Theory and Large Models," *International Economic Review*, 16(1), 75-91.
- Shaw, E.S. (1973), *Financial Deepening in Economic Development*, Oxford: Oxford University Press.
- Shrestha, M.B. and K. Chowdhury (2007), "Testing Financial Liberalization Hypothesis with ARDL Modelling Approach," *Applied Financial Economics*, 17(18), 1529-1540.
- Sirowy, L., and A. Inkeles (1990), "The Effects of Democracy on Economic Growth and Inequality: A Review," *Studies In Comparative International Development*, 25(1), 126-157.
- Stasavage, D. (2005), "Democracy and Education Spending in Africa," *American Journal of Political Science*, 49(2), 343-358.
- Stulz, R.M. (1999), "Globalization, Corporate Finance, and the Cost of Capital," *Journal of Applied Corporate Finance*, 12(3), 8-25.
- Sung, H.E. (2004), "Democracy and Political Corruption: A Cross-national Comparison," *Crime, Law and Social Change*, 41(2), 179-193.
- Tavares, J., and R. Wacziarg (2001), "How Democracy Affects Growth," *European Economic Review*, 45(8), 1341-1378.
- Taylor, L. (1983), *Structuralist Macroeconomics: Applicable Models for the Third World*, New York: Basic Books.
- Tebaldi, E. and B. Elmslie (2013), "Does Institutional Quality Impact Innovation? Evidence from Cross-country Patent Grant Data," *Applied Economics*, 45(7), 887-900.
- Van Wijnbergen, .S. (1983), "Credit Policy, Inflation and Growth in a Financially Repressed Economy," *Journal of Development Economics*, 13(1), 45-65.
- Vollmer, S. and Z. Maria. (2009), "Political Institutions and Human Development: Does Democracy Fulfil Its 'Constructive' And 'Instrumental' Role?" Policy Research Working Papers, World Bank.
- Webb D. 2004 "Legitimate Actors? The Future Roles for NGOs Against HIV/AIDS in Sub-Saharan Africa." in: Poku, N. and A. Whiteside, eds., *The Political Economy of AIDS in Africa*, Aldershot: Ashgate Publishing.

- Windmeijer, F. (2005), "A Finite Sample Correction for the Variance of Linear Efficient Two-step GMM Estimators," *Journal of Econometrics*, 126(1), 25-51.
- Wolak, F.A., and C.D. Kolstad (1991), "A Model of Homogeneous Input Demand Under Price Uncertainty," *American Economic Review*, 81(3), 514-538.
- Yildirim, J. and S. Sezgin (2005), "Democracy and Military Expenditure: A Cross-Country Evidence," *Transition Studies Review*, 12(1), 93-100.
- Yu, M. (2010), "Trade, Semocracy, and the Gravity Equation," *Journal of Development Economics*, 91(2), 289-300

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*Received June 15, 2017, Revised February 1, 2018, Accepted February 7, 2018.*