Economics Bulletin

Volume 39, Issue 1

Financial Openness and Income Inequality: Do Institutions matter for Africa?

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Abstract

There has been little empirical literature on the relationship between financial openness and income inequality in Africa. Using a panel threshold estimation technique we examine whether the effect of financial openness on income inequality is dependent to the institutional quality. We adopt the methodology proposed by Hansen (1999) on a panel dataset of 21 African countries over the period 1985-2014. Our results confirm the existence of a two-regime split. In fact, financial openness seems to significantly widen the income inequality in countries with low level of institutional quality while it does not have a significant effect in countries with relatively high institutional quality. These results concur with a well-established literature and demonstrate that financial openness-income inequality link is contingent on the quality of the political and institutional environment in the African countries.

The author would like to thank the editor, Hakan Yilmazkuday and the anonymous reviewer for his constructive comments.
Citation: Samouel Beji, (2019) "Financial Openness and Income Inequality: Do Institutions matter for Africa?", *Economics Bulletin*, Volume 39, Issue 1, pages 104-114
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Submitted: December 20, 2018. **Published:** January 13, 2019.

1. Introduction

The literature on income inequality and distribution of wealth tried to describe the variations in long term data (Piketty and Saez, 2003; Atkinson et al, 2011; Piketty, 2013). Therefore, several researches were focused on studying the factors explaining differences in distribution of income and wealth. Finance is identified by many scholars to be one of the main determinants of income inequality (Kim and Lin, 2011; Hamori and Hashiguchi, 2012; Ben Naceur and Zhang, 2016; Guillen, 2016; De Haan and Sturm, 2017; Brei et al, 2018). Inoue and Hamori (2012) propose an original point of view since they consider that finance may stimulate growth but does not necessarily imply poverty reduction and then less income inequality if growth is not inclusive. In the same vein, Inoue and Hamori (2013) utilise a new concept "financial permeation" to consider that an improvement in access to finance for poor, thank to microfinance for instance, is likely to enhance their overall well-being. Rewilak (2017) argue that financial deepening and increasing financial physical access are both efficient to raise income for poor and surprisingly financial instability does not negatively affect poverty reduction.

While there is a large amount of literature on the effects of financial development on income inequality, the link between financial openness and income distribution was an area of less focus. In the aftermath of the Great Recession of 2008, interest in re-implementing capital controls to avoid the detrimental effects of capital account openness reappeared. Those harmful effects were largely exposed and debated among scholars but at less larger extent the effects on income inequality. In an attempt to fill that gap and contribute to the current empirical literature, we will try to shed light on the effect of financial openness on income inequality by examining whether institutions quality matter in such relationship. That said much less is known about the African case. We specifically explore the link for the African countries which did not draw interest in the literature except some few empirical works. So far, the present study is the first to examine the way financial openness affects income inequality in Africa given the quality of institutions by using the threshold regression approach.

In fact, a small line of literature examine the effects of large-scale financial deregulation policies implemented in African countries since mid-1980s on income distribution. Most of those studies treated the relationship between financial development and not financial deregulation with inequality. The effects of those policies on alleviating income inequality are ambiguous. Kai and Hamori (2009) examine the relationship between globalization, financial deepening, and inequality in sub-Saharan Africa between 1980 and 2002. They find that openness (trade and financial liberalization) is detrimental for income inequality but this outcome is contingent to the level of development reached. They also find that financial depth reduces inequality. This result confirms our distinction between the two concepts of financial openness and financial development. Indeed, according to Kai and Hamori (2009) the effect of the latter on inequality is negative (an increase in financial development decreases income inequality) while the effect of the former is positive. Similarly to Kai and Hamori (2009), Batuo and Basungo (2015) apply dynamic panel data technique to investigate the effect of liberalisation policies on income distribution for a sample of 26 African countries from 1996 to 2010. They find that financial liberalization tends to escalate income inequality both for *de jure* and *de facto* measures of financial openness.

The remainder of the paper is structured as follows: Section II contains the empirical study and section III concludes.

2. Empirical Study

1.1. Model Specification and Methodology

The empirical model adopted is based on the framework of Bick (2010) in his study of the nonlinear relationship between inflation and growth. The model structure proposed by Bick (2010) allows capturing the presence of contingency effects and enables modelling the influence of financial openness on income inequality for our study. Therefore we estimate the threshold specification as follows:

$$INEQUALITY_{it} = \mu_i + \alpha X_{it} + \begin{cases} \beta_1 FO_{it} + \varepsilon_{it} & INS \le \lambda \\ \beta_2 FO_{it} + \varepsilon_{it} & INS > \lambda \end{cases} \qquad (1)$$

$$\text{With } \varepsilon_{it} \rightarrow N(0, \sigma_\varepsilon^2) \text{ (i.i.d)}$$

Even in the presence of fixed-effects it is possible to control for differences in the regime intercepts by including them in all but one regime as in the following extension of Eq. (1):

$$INEQUALITY_{it} = \mu_i + \beta_1 FO_{it} I(INS_{it} \le \lambda) + \delta_1 I(INS_{it} \le \lambda) + \beta_2 FO_{it} I(INS_{it} > \lambda) + \alpha X_{it} + \theta_t + \varepsilon_{it} \qquad (2)$$

Where $INEQUALITY_i$ is the inequality coefficient, FO_i is financial openness, *INS* is institutional development indicator, X_i is a vector of control variables, and ε_{it} is the error term. Country index is *i* and *t* is time index. I (.) is the indicator function, which takes the value 1 if the argument in the indicator function is valid, and 0 otherwise. If $\beta < 0$, this means that high levels of financial openness would alleviate income inequality and, conversely, if $\beta > 0$ an increase in financial liberalization would worsen income inequality. From the literature, we know that finance is sensitive to the quality of institutional and political environment.[1] However, different levels of institutional quality might cause different results regarding income inequality. In such configuration, it would be preferable to not use linear regressions across all countries included in the study. Consequently, we use the threshold regression approach proposed by Hansen (1999) to explore the nonlinear behaviour of financial openness in relation to income distribution. In this model, institutions quality (*INS*) acts as sample-splitting variable called also threshold variable. The above framework allows the effects of financial openness on income inequality to take two different values depending on whether the level of institutions quality is smaller or larger than the threshold level λ. The impact of financial openness on income distribution will be β_1 and β_2 for countries with a low or high level of institutions quality, respectively. It is obvious that under the hypothesis $\beta_1 = \beta_2$ and $\lambda_1 = \lambda_2$ the model becomes linear. The difference in regime intercepts, represented by δ_1, is not individual specific but the same for all cross-sections. The specification of Eq. (2) has not been considered by Hansen (1999) but by Bick (2010) and Kremer et al (2013).

This threshold estimation technique has been used to analyse the effects of finance on growth (Law et al, 2013), FDI on growth (Azman-Saini et al, 2010), FDI on income inequality (Wu and Hsu, 2012) among other topics.

This methodology presents two issues that should be circumvented. The first is to determine the estimate of λ and the slope parameters α and β's. The determination of $\hat{\lambda}$ is made by experimenting all possible values of λ in Equation (1). The estimator of the threshold value λ is selected as the one associated with the smallest sum of squared residuals:

[1] Ito (2006) argues that the effect of financial openness on financial development becomes positive only if a country reaches a certain threshold level of institutional development.

$$\hat{\lambda} = \arg\min S_n(\lambda) \qquad (3)$$

$S_n(\lambda)$ is the residual sum of squares computed across all possible values of λ.

In line with Hansen (2000) and Caner and Hansen (2004), the critical values for determining the 95% confidence interval of the threshold value are given by:

$$\Gamma = \{\lambda : LR(\lambda) \leq C(\alpha)\} \qquad (4)$$

Where $C(\alpha)$ is the 95% percentile of the asymptotic distribution of the likelihood ratio statistic $LR(\lambda)$. Once $\hat{\lambda}$ is identified, estimates of the slope parameters follows trivially as $\hat{\alpha}(\hat{\lambda})$ and $\hat{\beta}(\hat{\lambda})$. The second issue is to test the significance of threshold parameter λ. The limiting distribution of this supremum statistic is not standard and depends on numerous model-specific nuisance parameters. Since tabulations were not possible, inferences were conducted via a model based on bootstrap whose validity and properties were established by Hansen (1996).[2]

1.2. The data

The empirical analysis is based on a panel data set consisting of yearly data from 1985 to 2014, made up of 21 Sub-Saharan African (SSA) countries.[3] The number of countries and the time span of the dataset are constrained by the availability of institutional and political indicators from the International Country Risk Guide (ICRG). Owing to scarce inequality data for sub-Saharan Africa from World Development Indicators (2017) and Standardized World Income Inequality Database (SWIID) of Solt (2016), we use the estimated household income inequality (EHII) data obtained from the University of Texas Inequality Project (UTIP) which appear more consistent and accurate than other available data. Galbraith and Kum (2005) point out that this dataset has some advantages over that of Deininger and Squire (1996). First, it provides the annual estimates of household income inequality for most of the countries, including the developing ones. Second, because it utilizes the United Nations Industrial Development Organization's (UNIDO) reliable pay dispersion measures prepared for UTIP (UTIP–UNIDO), the pay dispersion changes over time and differences across countries are reflected in income inequality. Finally, all estimates are consistently adjusted to the household gross income as a reference point. (Hamori and Hashiguchi, 2012).

Financial openness is measured by KAOPEN, which is the Chinn-Ito index for financial liberalization. The source of this index is the database of Chinn and Ito (2008) (data updated to 2016). We also used a *de facto* financial openness indicator LANEFINOP in a purpose of sensitivity analysis. It is the sum of foreign liabilities and foreign assets as share of GDP. The source of that indicator is Lane and Milesi-Ferretti (2007) (data updated to 2011).

Following the objective to analyse the nonlinear relationship between financial openness and income inequality, we use the institutional quality for the threshold variable. The institutional development indicator is constructed by averaging 12 sub-indicators: government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions,

[2] Law et al (2013), p. 5374.

[3] Our sample contains: Algeria, Angola, Botswana, Cameroon, Congo Republic, Côte d'Ivoire, Egypt, Ethiopia, Gabon, Ghana, Kenya, Malawi, Morocco, Mozambique, Nigeria, Senegal, South Africa, Tanzania, Tunisia, Uganda and Zimbabwe.

law and order, ethnic tensions, democratic accountability and bureaucracy quality. However, the problem with the construction of the institutions quality indicator stems from the heterogeneous scale of the sub-indicators. Indeed, corruption, law and order, military in politics, religious tensions, ethnic tensions and democratic accountability are scaled between 0-6, whereas government stability, socioeconomic conditions, investment profile, internal conflict and external conflict are scaled between 0-12 and bureaucratic quality between 0-4. Therefore, we unified all the proxies to obtain an indicator scaled between 0-6. To do so, we multiplied the proxies scaled between 0-4 by 3/2 and divided by 2 those scaled between 0-12. The source of the 12 sub-indicators is the ICRG database. Another institutional development indicator is used to run sensitivity analysis. The indicator INS_{WGI} is constructed by averaging 6 sub-indicators: voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and corruption. All the sub-indicators are scaled between -2.5 and 2.5. The source is World Governance Indicators (WGI) (2017) database.

The control variables X_i include:

• *Financial Development*, this variable is alternatively measured by domestic credit provided by financial sector, domestic credit to private sector, domestic credit to private sector by banks, and broad money. The expected sign of that variable is ambiguous as explained in Section III of the present work. All these variables are expressed as share of GDP. The source is WDI (2017).

• *GDP per capita growth*, GDP per capita based on constant 2010 U.S. dollars. The sign of that variable is expected to be negative since an increase in growth would be wealth improving and then reduce income inequality in presence of an efficient state redistributive policy. The sign would be positive otherwise. The source is WDI (2017);

• *Inflation rate*: Measured by the growth rate of the consumer price index. The expected sign remains undetermined and depends of the inflationary pressure nature: supply-driven or demand-driven (e.g. Blinder and Esaki, 1978 and Buse, 1982). The source is the WDI (2017);

• *Human Capital* proxied by gross secondary school enrollment rate. The coefficient of this indicator is expected to be negative since the accumulation of knowledge is likely to decrease income inequality. The source is WDI (2017);

• *Trade* measured by the sum of exports and imports as a share of GDP. Trade captures the degree of openness. According to previous studies, the impact of trade on the Gini coefficient is uncertain as asserted by Beck et al (2007) to name but a few. The source is WDI (2017).

Table I and II present the descriptive statistics and correlation matrix of the variables employed in the analysis, respectively.

Table I. Summary Statistics (1985-2014)

	Observations	Mean	Std Dev	Min	Max
INEQUALITY (%)	630	50.28	5.62	32.64	68.42
INS	630	3.3	0.59	1.41	4.7
INS_{WGI}	630	-0.54	0.53	-1.66	0.86
KAOPEN	630	-0.85	1.04	-1.89	2.38
LANEFINOP	630	1.24	0.58	0.2	4.24
DCFS (%)	630	35.44	38.33	-79.09	192.66
PRIVY (%)	630	24.73	27.16	-0.044	160.12
BANK (%)	630	20.92	18.01	0.31	84.05
BROAD (%)	630	36.22	23.55	7.28	151.54

GROWTH (%)	630	1.48	4.73	-27.14	30.34
HUMAN (%)	630	40.47	23.94	3.41	99.86
TRADE (%)	630	67.89	27.39	14.32	178.99
INFLATION (%)	630	111.1	1228.11	-11.68	24411.03

Table II. Correlation Matrix (1985-2014)

	Inequality	INS	KAOPEN	DCFS	PRIVY	BANK	BROAD	GROWTH	TRADE	HUMAN	INFLATION
Inequality	1										
INS	0.009	1									
KAOPEN	0.046	0.22	1								
DCFS	-0.256	0.138	-0.11	1							
PRIVY	-0.203	0.397	0.008	0.862	1						
BANK	-0.147	0.441	0.089	0.797	0.914	1					
BROAD	-0.197	0.216	0.047	0.65	0.573	0.686	1				
GROWTH	0.063	0.121	0.115	-0.124	-0.061	-0.066	-0.025	1			
TRADE	0.335	0.133	-0.049	-0.237	-0.085	-0.037	-0.005	0.033	1		
HUMAN	-0.067	0.362	0.198	0.459	0.576	0.598	0.536	0.008	0.157	1	
INFLATION	-0.032	-0.094	-0.07	0.017	-0.048	-0.063	0.026	-0.133	0.09	-0.044	1

INEQUALITY: Inequality indicator, **INS**: Institutional development indicator, **INS**$_{WGI}$: Institutional development indicator based on WGI database, **KAOPEN**: Financial openness indicator, **LANEFINOP**: Sum of foreign assets and liabilities as share of GDP, **DCFS**: Domestic credit provided by financial sector as share of GDP, **PRIVY**: Domestic credit provided to private sector as share of GDP, **BANK**: Domestic credit provided by banking sector as share of GDP, **BROAD**: M2 as share of GDP, **GROWTH**: GDP per capita growth, **HUMAN**: Human capital indicator, **TRADE**: Sum of exports and imports as share of GDP. **INFLATION**: Inflation rate.

1.3. Results

Table III reports the results of estimating Equation (2) using the institutions quality indicator as a threshold variable and four financial sector development indicators with inequality indicator as dependent variable. The statistical significance of the threshold estimate is evaluated by p-value calculating using bootstrap method with 300 replication and 10% trimming percentage.

Table III. Threshold regression using institutions indicator as a threshold variable

	Model 1 DCFS	Model 2 PRIVY	Model 3 BANK	Model 4 BROAD
INTERCEPT	41.21 (0.000)***	41.24 (0.000)***	41.746 (0.000)***	44.905 (0.000)***
GROWTH	0.012 (0.78)	0.006 (0.902)	-0.003 (0.958)	0.014 (0.696)
FINANCIAL DEVELOPMENT	-0.037 (0.018)**	-0.049 (0.07)*	-0.055 (0.067)*	-0.149 (0.000)***
HUMAN	-0.156 (0.000)***	-0.14 (0.000)***	-0.134 (0.000)***	-0.205 (0.000)***
INFLATION	-0.342 $(0.1)^{11\%}$	-0.38 (0.09)*	-0.501 (0.095)*	-0.356 (0.043)**
TRADE	0.075 (0.000)***	0.084 (0.000)***	0.084 (0.000)***	0.056 (0.000)***
FIN OPENNESS/ INEQUALITY				
LOW-INS	2	2.652	3.069	1.57

	(0.000)***	(0.000)***	(0.000)***	(0.000)***
HIGH-INS	-0.372 (0.216)	-0.117 (0.714)	-0.162 (0.638)	-0.246 (0.311)
Threshold Estimate **95% Confidence interval**	2.916 [2.854;2.958]			
LM-test for no threshold	33.36	38.14	40.68	27.52
Bootstrap p-value	0.08	0.08	0.073	0.09

Notes: P-value was bootstrapped with 300 replications and 10% trimming percentage. There are 9 countries in the high-INS and 12 countries in the low-INS. H_0: no threshold effect. *** and ** denote significant at 1% and 5% respectively.

As shown in Table III, the threshold estimate is 2.916 with corresponding 95% confidence interval [2.854; 2.958]. The threshold level is the same for the four models and the tests of no threshold effect show that we reject the null hypothesis and admit the presence of a threshold effect. In our dataset 12 out of 21 countries (about 57%) do not exceed that threshold value of institutional quality.[4] Thus, the sample can be split into two groups: countries with institutional quality indicator over 2.854 are classified as high-INS group (Algeria, Botswana, Egypt, Ghana, Kenya, Morocco, Senegal, South Africa and Tunisia) while the ones with institutional indicator values under 2.854 are classified as low-INS group (Angola, Cameroon, Congo Republic, Côte d'Ivoire, Ethiopia, Gabon, Malawi, Mozambique, Nigeria, Tanzania, Uganda and Zimbabwe). Having established the existence of a threshold, the next question is to define how financial openness affects income inequality. We assess the statistical significance of a two regime-dependent financial openness coefficients β_1 and β_2 in the Equation (2): one with better institutional quality and the other with poor one. Financial openness appears to have positive and statistically significant effect of income inequality if it is less than the threshold for the four models. On the other hand, if the institutional quality is higher than the threshold, the impact of financial openness is negative but statistically insignificant. Hence, financial openness seems to worsen income inequality for countries lacking enough institutional development, while the effect is no significant for countries with a higher level of institutions quality. It suggests that the effects of financial openness on income inequality are nonlinear in nature and not even "kick in" after institutional development exceeds a threshold level. The results remain robust for the four proxies for financial development while the coefficients are somewhat different in magnitude. The distinction we have made between financial openness and financial development is confirmed by the results shown in Table III. Indeed, the four financial development indicators have a negative and significant effect on income inequality. It means that unlike financial openness, an increase in financial development would be beneficial for more balance in income distribution. This outcome is in line with the findings of Beck et al (2007) and Demirgüç-Kunt and Levine (2009) who point out that a less developed financial system can affect the importance of individual skills (versus parental wealth, social status and political connections) in determining individual economic opportunities. Furthermore, the general quality of a financial system may influence capital allocation which in turn affects the demand for labor across sectors, hence influencing income levels for different parts of society (Johansson and Wang, 2014). This result drew us to operate a threshold test to check whether as well it exists a nonlinear relationship between financial development and income inequality. The test is applied for the four financial development indicators and the results show the absence of threshold for such relationship.

Even though previous similar studies have found that economic growth affects inequality, in our regression the GDP per capita growth does not play a significant role in reducing inequality among African countries. Unlike GDP per capita growth and as expected, the human capital indicator has a significant role in reducing income inequality for the different measures of financial development. In this

[4] We take into account the values of the confidence interval.

sense, access to education for poor categories of population paves the way to skilled jobs which are in general well paid and thus reduces income distribution imbalance.

The other important and unusual upshot shown by the regression is the role played by inflation in tackling income inequality. For African countries, inflation may contribute significantly to curb income inequality for all financial development indicators (although inflation is significant at 11% when financial development is proxied by domestic credits provided by financial sector as share of GDP). Theoretically, inflation may result in a decrease in inequality if the inflationary pressure is supply-driven, that is, if input costs increase faster than profits (Johansson and Wang, 2014). The other theoretical explanation lies in the Keynes statement "The Euthanasia of the Rentier" since initial financial capital is depreciating as much as inflation is growing. It is thanks to such phenomenon that generations of borrowers have been able to improve their wealth or access to real estate propriety since the real cost of the loan (i.e. its amount after deduction of the inflation) has been dwindling. In fact, during the 1970's, the social model first signs collapse resulting from the post-war compromise appear in a context of exacerbation of tensions between capital and labor for the sharing of added value. Because it increases the amount of wages without boosting their real value, inflation is one of the strategies of Western leaders to mitigate social antagonisms by reducing inequality in society without altering the way in which it operates (Streek, 2014). Although, it should be warned that too much inflation would be harmful to overall economy via the issues raised by the hyperinflation phenomenon. It is especially the case for some African countries in our sample such as Zimbabwe which experienced an inflation rate of 24411% and 16275% in 2007 and 2008 respectively before returning to 3% in 2010. Though the Lagrange multiplier test of no threshold produced an insignificant p-value of 0.531 which suggests the absence of such effect between inflation and income inequality.[5]

Last, trade openness does not appear to dwindle income inequality in Africa. The coefficient of trade openness is positive and significant at 1% in the four regressions no matter the financial development indicator taken. This result is consistent with past studies such as Anderson (2005) and Kai and Hamori (2009) that predicted that more trade openness leads to an increase in income inequality in overall countries. Also in the same way, Inoue and Kamori (2012) found that trade openness does not lead to less poverty for a sample of 28 Indian states. A possible explanation for such result would be via the outsourcing channel. In fact, firms in developed countries (mainly European countries that have tight relationships due to proximity and historical reasons such as France, Belgium, Italy, etc.) send to African countries least skilled and labor-intensive activities and keep only design and high-skilled activities in Europe. It is true that such policy would create jobs and enhance overall employment rate in African countries but it induces them to keep low wages in the aim to do not lose their comparative advantage.

So far, our results are based on the use of Chinn-Ito financial openness indicator which is considered as a *de jure* financial openness index and an institutional quality indicator calculated from ICRG database. To verify the sensitivity of our results and the estimated threshold value, we took into account different measures of financial openness and institutional quality. Indeed, we take a *de facto* financial openness indicator LANEFINOP which is the sum of foreign assets and foreign liabilities as share of GDP. Also we use another institutional quality indicator INS_{WGI} based on sub-indicators from the WGI database rather than ICRG. Table IV reports the results found.

Table IV. Threshold regression using alternative institutions indicator as a threshold variable

	Model 1	Model 2	Model 3	Model 4

[5] The results of that test are available upon request as well as for the one between financial development and income inequality.

	DCFS	PRIVY	BANK	BROAD
INTERCEPT	47.65 (0.000)***	47.363 (0.000)***	47.18 (0.000)***	47.35 (0.000)***
GROWTH	0.037 (0.226)	0.038 (0.213)	0.045 (0.15)	0.041 (0.179)
FINANCIAL DEVELOPMENT	-0.02 (0.034)**	-0.024 (0.083)*	-0.014 (0.039)**	-0.018 (0.014)**
HUMAN	-0.095 (0.000)***	-0.098 (0.000)***	-0.094 (0.000)***	-0.096 (0.000)***
INFLATION	-0.069 (0.052)*	-0.047 (0.066)*	-0.047 (0.066)*	-0.032 (0.076)*
TRADE	0.003 (0.775)	0.003 (0.791)	0.003 (0.751)	0.002 (0.807)
FIN OPENNESS (LANEFINOP)/ INEQUALITY				
LOW-INS$_{WGI}$	1.14 (0.011)***	1.16 (0.01)***	1.198 (0.009)***	1.258 (0.005)***
HIGH-INS$_{WGI}$	-1.62 (0.118)	-1.528 (0.217)	-1.496 (0.116)	-1.429 (0.128)
Threshold Estimate **95% Confidence interval**	-0.1 [-0.161;-0.099]			
LM-test for no threshold	41.27	39.19	38.77	38.93
Bootstrap p-value	0.083	0.083	0.09	0.086

Notes: P-value was bootstrapped with 300 replications and 10% trimming percentage. There are 5 countries in the high-INS$_{WGI}$ and 16 countries in the low-INS$_{WGI}$. H_0: no threshold effect. *** and ** denote significant at 1% and 5% respectively.

The results of this regression present slight differences comparing to those of Table III. In fact, the LM test reveals the existence of a threshold and its estimate is -0.1 with corresponding confidence interval [-0.161;-0.099]. The threshold level does not change with the financial development indicator used. Except the magnitude of coefficients, the only difference comparing to the first regression concerns the trade openness variable which appears to be no significant. Thus according to the above estimate, trade openness would not be detrimental to income inequality for African countries but not favorable either since the variable coefficient is no significant. Besides the results remain robust to the modifications of institutional development and financial development measurements comparing to the previous regression.

3. Conclusions

Owing to the lack of data on inequality for African countries, there is almost no regional level analysis on the relationship between financial openness and inequality. While empirical analyses have been conducted for a broader group of regions, including African countries, their empirical results are controversial (Kai and Hamori, 2009). With the present study, we show new evidence on the role of institutional development to shape the nature of the relationship between financial openness and inequality. Using data from 21 African countries over the period 1985-2014 we demonstrate that financial integration is not a determinant factor to alleviate income inequality even in countries with relative advanced quality of institutions. Furthermore, it seems that inflation is supply-driven for African countries in the sense that input costs are increasing faster than profits which explained why inflation appears to stymie income inequality in our study. The results found are robust to the modifications of financial openness and institutional quality measurements.

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