



The Effect of Inflation Threshold on Financial Development and Economic Growth: A Case Study of D-8 Countries

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Received: 08 July 2019, Revised: 20 October 2019, Accepted: 12 November 2019

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Abstract

Although financial development facilitates economic growth, inflationary conditions can negatively affect the relationship between financial development and economic growth. This paper studies the threshold inflation rate for the effect of financial development on economic growth by using the panel smooth transition regression (PSTR) model and the data from eight Islamic developing countries of the D-8 Group over the period 1990–2017. Results show an asymmetric relationship at different levels of inflation between financial development and economic growth. The inflation rate will be transferred at the smooth transition speed of 0.93 bypassing the threshold of 11.88 from the first regime to the second regime, which is a nonlinear relationship in the model. Higher inflation levels reduce the motivation of the investor and consequently reduce the investment. On the other hand, the reduction in the productivity of production factors brings about the negative effect of financial development on economic growth. Thus, countries with a higher inflation rate threshold must have access to an efficient financial system to achieve low inflation rates.

Keywords: D-8 Group, Economic Growth, Financial Development, Nonlinear Panel Approach.

JEL Classification: C22, E44, O16.

Introduction

The role of financial development in economic growth has long been a theoretical and empirical issue for economists. The starting point of this issue is in the era of Adam Smith, and his implicit reference to the emergence of banks. Based on the results of many studies including Kim and Lin (2010), Bittencourt (2012), Hadian and Izadi (2014), and Njindan and Odhiambo (2017), the role of financial development in economic growth varies depending on the inflation rate. But the question that arises is at what inflation rate, financial development leads to economic growth. Another question is at what inflation rate, the effect of financial development will disappear. Finding the answers to these questions can have a profound effect on economic policymaking and achieving economic growth. If economists know exactly at what inflation rate financial development leads to the economic growth, they can adopt appropriate policies to achieve this inflation rate, and ultimately achieve the desired economic goals with a certain level of financial development. Thus, the variable of the inflation rate is a very important factor in the process of achieving economic growth through financial development. Hence, when economic policymakers plan to reform the financial sector, they have to adopt anti-inflationary policies.

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Various studies have been conducted by economists such as Fischer, Esterly, Russel, etc. to establish the proper inflation rate that promotes economic growth and financial development for different countries. These researches also try to identify what inflation rate prevents economic growth and financial development. Their results indicate that if there is a low and balanced inflation rate, financial development will help the economic growth, but if the inflation rate is high, it will harm the economic growth. To prove their findings, they argued that the high inflation rate would make financial development impossible by undermining the role of monetary and near-money assets. Besides, high inflation rates will make the information about investment projects very costly. The profits from investments will also be very volatile, and these factors will harm growth. It should be noted that researchers in the previous studies confirmed the inflation threshold effects on financial development for many countries. To the best of our knowledge, there is no study for the considered countries (the eight Islamic countries developing the D-8 group), and this is the first study that examines three variables of inflation, financial development, and economic growth from this aspect for these countries. Countries in this study must consider financial development in recent years as one of the goals of financial policymakers for achieving economic growth and development in developing countries. On the other hand, one of the economic problems facing these countries is the existence of the inflationary condition and rising inflationary fluctuations. Hence, considering inflation in examining the impact of financial development on the economic growth of these countries can have an impact on the process of financial development affecting economic growth.

This study examined these questions by using a threshold model for the developing countries of the D-8 Group and tended to indicate if there was a relationship between the inflation threshold effect on economic growth and financial development. If so, it will estimate the inflation threshold and ultimately examine its impact on the relationship between economic growth and financial development.

The remainder of this paper is organized as follows. Section 2 provides a literature review of the subject matter. In Section 3, the data and the research methodology are presented. Section 4 provides the empirical results, and Section 5 concludes the paper.

Literature Review

Inflation interferes with the ability of the financial sector to allocate resources efficiently. Specifically, recent theories emphasize the importance of information asymmetry in credit markets and show how inflation increases have a positive effect on credit market friction and have negative consequences on financial sector performance and consequently on the long-run real economy (Huybens and Smith, 1999).

In general, inflation affects financial market efficiency, investment, and economic growth. High inflation rates interfere with the efficiency of the financial system and prevent long-run economic growth. At low inflation rates, the economy can approach both high and low-level steady-state in the real sector of the economy. While at high inflation rates, a stable situation with a high level of activity is not achievable. Thus, there are critical rates of inflation so that if the inflation rate exceeds this threshold level due to the relatively severe friction of the financial markets, the real sector of the economy cannot approach high activity levels.

The relationship between financial development indicators and economic growth can be nonlinear. Accordingly, the threshold regression method is used to investigate the nonlinear relationship between the variables and also to determine the threshold for the variable that may be one of the independent or non-model variables. The threshold regression model with two regimes is as follows:

$$Y_t = \beta_1 x_t + e_{1t} \quad \text{if} \quad q_t \leq \gamma \quad (1)$$

$$Y_t = \beta_2 x_t + e_{2t} \quad \text{if} \quad q_t > \gamma \quad (2)$$

This model allows the estimated regression parameters to vary depending on the value of q where q_t is the threshold variable (here; inflation) used to divide the total observation into two groups that each group is called a regime and can be one of the elements. Independent or elementary variables are outside the theoretical model. The dependent variable is y_t , the vector independent variables are x_t , the disturbance component is e_{it} , and the threshold value is γ (Hansen, 2000).

Schumpeter and Redvers (1934) described financial development as the engine of economic growth. According to him, community savings will ultimately lead to economic growth. Yet, studies in the 1970s and 1980s revealed a negative relationship between economic growth and financial development in Latin American countries. The economic statistics of these countries in the aforementioned periods indicate that there were relatively high inflation rates of this negative relationship. Therefore, the World Bank advised the developing countries to reduce their inflation rate before looking for policies for financial development. Hence, high inflation was likely to harm the performance of financial markets and, thus, change the relationship between financial development and economic growth (De Gregorior and Guidotti, 1995).

Boyd et al. (2001) found that the inflation rate interfered with the ability of the financial sector to allocate resources efficiently, and caused the negative performance of financial markets and, consequently, long-run activities of the real sector of the economy. They indicated that inflation had a relationship with financial recession. Therefore, if the inflation rate goes up, the financial sector cannot accomplish the process of development. If the inflation rate is too high, it will decrease profits, reduce the incentive for savings, and ultimately lead to the withdrawal of savings from the financial sector (Hadian and Izadi, 2014).

Khan et al. (2006) found that inflation could affect the financial system development in the long run. Depending on whether an increase in inflation on financial development is higher or lower than the inflation threshold, the effect of this increase will be different. Yet, they proposed that a high inflation rate would increase the savings cost. This will make the banks try to reduce the cost and the real price paid to investors. On the other hand, the lack of a flexible interest rate originated in the regulatory measures, will reduce the real interest rates, which in turn reduce the investor's profits. This results in the withdrawal of capital from the financial system and accordingly a decline in investment. As a result, the financial sector provides smaller loans, the assignment of resources will be less efficient, and the activities of financial intermediaries will be reduced as a result of the negative consequences of inflation. Ultimately, the decline in capital formation negatively affects the long-run economic performance and the stock market activities (Chindo, 2014).

Barnes (2001) studied the relationship of the three variables including inflation, financial development, and economic growth with credit and cash debt, and found that inflation had a negative significant relationship with credit and cash debt. Results are consistent with Bruno and Easterly (1998), and Huybens and Smith (1999).

Rousseau and Wachtel (2002) indicated an inflation threshold between 13% and 25% for financial affairs and growth. Khan et al. (2006) studied the linear and nonlinear relationship between inflation and financial development and suggested that there was a negative nonlinear relationship between inflation and financial development with a threshold of about 3% to 6%. They also claimed that this threshold would depend on the size of the financial development.

Wang and Mansor (2011) proposed that there was a threshold for inflation concerning the

impact of financial development on economic growth. Hadian and Izadi (2014) found that there was a positive significant relationship between financial development and the growth in inflationary regimes for the Iranian economy. Njindan and Odhiambo (2017) indicated that for countries in Ghana and Nigeria, there was a nonlinear relationship between financial growths at different rates of inflation. Besides, financial development for both countries low inflation rate has a positive significant effect on financial growth, and a high inflation rate has a non-significant effect on economic growth.

Ehigiamusoe et al. (2019) examine the moderating effect of inflation on the finance-growth nexus in the West African region during 1980–2014. They found that linear financial development has a positive impact on economic growth, while the interaction term between financial development and the inflation rate harms growth. The marginal effect of financial development evaluated at the minimum level of inflation rate is positive, while that evaluated at the maximum level is negative. These findings imply that, in the West African region, an increase in financial development and a decrease in inflation appear to have greater long-run economic benefits than a simultaneous increase in both variables.

Research Methodology

Materials and Methods

To study the inflation threshold for the effect of financial development on the economic growth of selected Islamic countries including Indonesia, Iran, Bangladesh, Pakistan, Turkey, Malaysia, Egypt, and Nigeria over the period 1990–2017, this paper, uses the panel smooth transition regression (PSTR) model. This model was developed by Fok et al. (2004), and Colletaz and Hurlin (2006), which is the extended form of the PTR model with the inclusion of the transition function. According to Gonzalez et al. (2005), and Colletaz and Hurlin (2006), a PSTR model with two limiting regimes and a transition function is specified as follows:

$$y_{it} = \mu_i + \beta'_0 x_{it} + \beta'_1 x_{it} g(q_{it}; \gamma, c) + u_{it}, \quad i = 1, \dots, N, t = 1, \dots, T \quad (3)$$

where y_{it} is the dependent variable, x_{it} is the exogenous variables, μ_i is the fixed effects of the sectors, and u_{it} is an error component with $i.i.d. N(0, \sigma_\varepsilon^2)$ assumed. Furthermore, the research model is specified according to Njindan and Odhiambo (2017) as follows.

$$GDP = \alpha_0 + \beta_1 INF + \beta_2 X + \varepsilon_t \quad (4)$$

Along with the variable of inflation, which as a transition variable will explain the relationship between economic growth and financial development at different levels of inflation, in this research, the control variables in the vector X such as financial development, physical capital, labor force, as well as the trade openness variable have been used. The capital development indicator (CD) is domestic credit to the private sector as a percentage of GDP which refers to financial resources provided to the private sector, such as loans and trade credits. This variable not only indicates the level of domestic investment but also measures the level of development of the financial institutions. Ideally, a higher value of CD indicates that the credit provided will lead to economic growth. Yet, this variable does not take into account the public sector, and only shows the role of financial intermediaries in providing financing to the private sector investors. Concerning the control variables, the model is stated as follows:

$$\ln GDP_{It} = \alpha_0 + \beta_1 INF_{It} + \beta_2 \ln CD_{It} + \beta_3 \ln L_{It} + \beta_4 \ln K_{It} + \beta_5 \ln OPN_{It} + \varepsilon_t \quad (5)$$

where *GDP* is per capita GDP, a *CD* is a domestic credit to the private sector as a percentage of GDP, *INF* as the financial development indicator is the inflation rate, and is chosen as the transition variable, *K* is the physical capital, *L* is the labor force, *OPN* is the trade openness index that is obtained from the total export-to-import ratio, and *ln* is the natural logarithm. It should be noted that all variables were obtained from the World Bank. Data analysis was performed by using statistical methods and tests, and the PSTR regression model was implemented by using STATA, MATLAB, and EVIEWS.

Empirical Results

Before estimating the model, it is necessary to check the stationarity to ensure the long-run relationship between the variables and avoiding spurious regression. The selection of the stationarity test will vary depending on whether the data are independent or dependent. Pesaran's (2004) test can be used for this purpose which is called *CD*¹ determining the dependence or cross-sectional independence of the balanced and unbalanced panels.

If the value of this statistic is at a certain significant level above the critical value of the standard normal distribution, the null hypothesis and cross-sectional dependence will result. In this case, using the imaging tests of the Im-Pesaran-Shin or Levin-Lin-Chu will increase the likelihood of spurious unit root.

Based on Table 1, the results of the *CD* test indicate that the null hypothesis (there is no cross-dependence at the significant level) will not be rejected. Hence, there is no cross-dependence.

Table 1. Results of Cross-Sectional Independence Test

Dependent Variable	t-Statistic	Prob.
Ln GDP _{it}	-0.418	0.675

Source: Research finding.

To examine the reliability of the variables, the Levin–Lin–Chu test was applied. Results are provided in Table 2.

Table 2. Results of the Unit Root Tests

	Levin–Lin–Chu test		
	<i>GDP</i>	<i>INF</i>	<i>CD</i>
<i>At level of</i>	1.09 (0.08)	-2.76 (0.002)*	(1-38) 0.91
With once differencing	(0.000)* -4.32	At a steady level	(0.000)* -7.25
	<i>L</i>	<i>INV</i>	<i>OPEN</i>
<i>At level of</i>	(0.99) 2.57	(0.67) 0.44	(0.43) -0.16
With once differencing	(0.000)* -4.5	(0.000)* -4.83	(0.000)* -3.98

Note: * indicates the significance level of 1% (numbers in parentheses indicate the probability value).

Source: Research finding.

Results indicate that, apart from the inflation rate variable that is at a stable level, GDP per capita, labor force, credits granted to the private sector (financial development index), gross fixed capital formation (GFCF), and trade openness are reliable with one differencing. Based on the test's results, variables (other than inflation) have a unit root. Hence, to ensure that there is no spurious regression, and to identify the long-run relationship between the variables, after estimating the model, the cointegration test should be applied for the model remainders (Granger causality test).

¹Cross-sectional Dependence

The test's results of the presence of fixed or random effects in the model are illustrated in below table:

In the estimation of panel data, we face two general problems: first, the intercept for all sectors is the same; the second is the intercept for all the different sectors, which is called the panel data. To choose between a longitudinal data model and a model of the fixed effects of the Chow test, the null hypothesis is based on whether there is a pool or longitudinal data. Based on Table 3, the results of this test with a probability value of 0.000 reject the null hypothesis and confirm the presence of fixed effects in the model.

Table 3. Testing the Panel Data

Chow test	
Probability value of the F-statistics	50.25 (0.000)

Source: Research finding.

Subsequently, Breusch–Pagan test for choosing between models, with the combined data or random effects that null hypothesis is based on the presence of longitudinal data, has been applied. In Table 4, the results of this test with a probability value of 0.000 will rule out the presence of longitudinal data in the model.

Table 4. Testing the Random Effects of the Data

Breusch–Pagan test	
Probability value of chi2 statistics	53.37 (0.000)

Source: Research finding.

when the Chow test confirms the presence of a fixed-effects model and the Breusch-Pagan test confirms the presence of a random-effects model, the Hausman test will be used to choose between the two. Results of the Hausman test with a probability value of 0.000 confirm the presence of the fixed effects in the model.

Table 5. Testing the Fixed Effects in the Model

Hausman test	
Probability value of chi2 statistics	60.76 (0.000)

Source: Research finding.

Results of Model Estimation

First, the nonlinear relationship, the number of regimes, and the number of threshold limits of the model should be established. For this purpose, the results of the tests in the research variables are reported in Tables 6.

Based on Table 6, Fischer coefficients, Lagrange Wald coefficients, and exponential ratios for one and two thresholds represent a nonlinear pattern among the studied variables, which represents the presence of at least one transition function in the model.

Table 6. Linearity of Test

	LM_w	LM_f	LR
M=1	(0,005) 15.06	(0.005) 3.82	(0.000) 15.64
M=2	(0.000) 25.75	(0.000) 12.64	(0.000) 30.85
H0:r=0 H1:r=1			

Source: Research finding.

Then, the residuals' nonlinear relationship is tested to obtain the number of transition functions¹ in the model.

Table 7. Lack of Nonlinear Relationship between the Residuals

	LM _w	LM _r	LR
M=1	(0.23) 5.46	(0.28) 1.26	(0.23) 5.53
M=2	(0.13) 12.36	(0.17) 1.43	(0.12) 12.74

H0:r=0 H1:r=1

Source: Research finding.

Table 8. Identifying the Threshold Locations

	Schwartz criterion	Akaike criterion
M=1	-6.9	-7.08
M=2	-6.84	-6.99

Source: Research finding.

Results of the Table 8 indicated that a threshold was enough to examine the nonlinearity of the variables. As a result, the final model is estimated as a two-regime PSTR model with a transition function. The final pattern is as follows, whose results are reported in Table 9:

$$\ln GDP_{it} = \mu_i + \alpha_0 INF_{it} + \beta_0 CD_{it} + \delta_0 \ln L_{it} + \theta_0 \ln INV_{it} + \rho_0 OPEN_{it} + [\beta_1 CD_{it} + \delta_1 \ln L_{it} + \theta_1 \ln INV_{it} + \rho_1 OPEN_{it}] g(q_{it}; \gamma, c) + \varepsilon_{it} \quad (6)$$

Table 9. Results of Model Estimation at Different Inflation Rates

Variable	Coefficient (T-statistic)	Variable	Coefficient (T-statistic)
Linear part		Nonlinear part	
CD	(3.59) 0.012	CD	(-6.02) -0.028
lnL	(10.87) 0.036	lnL	(-10.68) -0.010
lnINV	(7.02) 0.17	lnINV	(-4.01) -0.026
OPEN	(1.03) 0.005	OPEN	(-2.01) -0.007

(Slope parameter) 0.93 = Gamma

(Place of occurrence of regime change) 11.88 = C

Source: Research finding.

First regime threshold: $G(q_{it}; \gamma, c) = 0$

$$\ln gdp_{it} = \mu_i + 0/012 Cd_{it} + 0/17 \ln Inv_{it} + 0/036 \ln L_{it} + 0/005 opn_{it} \quad (7)$$

Second regime threshold: $G(q_{it}; \gamma, c) = 1$

$$\ln gdp_{it} = \mu_i - 0/016 Cd_{it} + 0/14 \ln Inv_{it} + 0/026 \ln L_{it} - 0/002 opn_{it} \quad (8)$$

Based on the results, all variables except for the trade openness in the first regime are significant. Besides, the variables' coefficients indicate that the relationship between economic growth and financial development at different inflation rates is not constant, but follows a regime pattern. The economic growth was asymmetric at different inflation rates, but the variables' coefficients fluctuated between the linear part of π and the linear and

¹Note: m denotes the number of threshold locations, and r represents the number of transition functions.

nonlinear totality of $\theta + \pi$. Considering that in the STR panel regime, the variables' coefficients change for the value of the transition variable and the slope parameter, they are not constant throughout the time. Therefore, the numerical value of the coefficients presented in Table 7 cannot be directly interpreted, and we will just analyze the signs. Based on the results, financial development has a nonlinear effect on economic growth. Inflation via shifting from the first regime to the second regime with a very gentle gradient of 0.93 is the key factor in the transition and creation of a nonlinear relationship between economic growth and financial development. Accordingly, financial development at different inflation rates has a different effect on the economic growth in the G-8 countries. Based on the results and Figure 1, this effect has been estimated positively and significantly in the first regime, but bypassing the threshold (11.88) and reaching higher inflation rates, it has a negative significant effect on economic growth. Inflation will reduce the investment profits, which will reduce the incentive for saving, and will harm the economic growth. Thus, the more inflation increases, the more is its negative impact on economic growth.

As can be seen, the results are in line with the theoretical issues. However, financial development, on the one hand, facilitates the provision of financial resources and increases investment in the production process, but on the other hand, increasing the speed of money circulation, it might increase the inflation rate. Therefore, in high inflation conditions, not only financial development will not help the economic growth, but also, the intensification of inflation, will increase its negative impact on the economic growth.

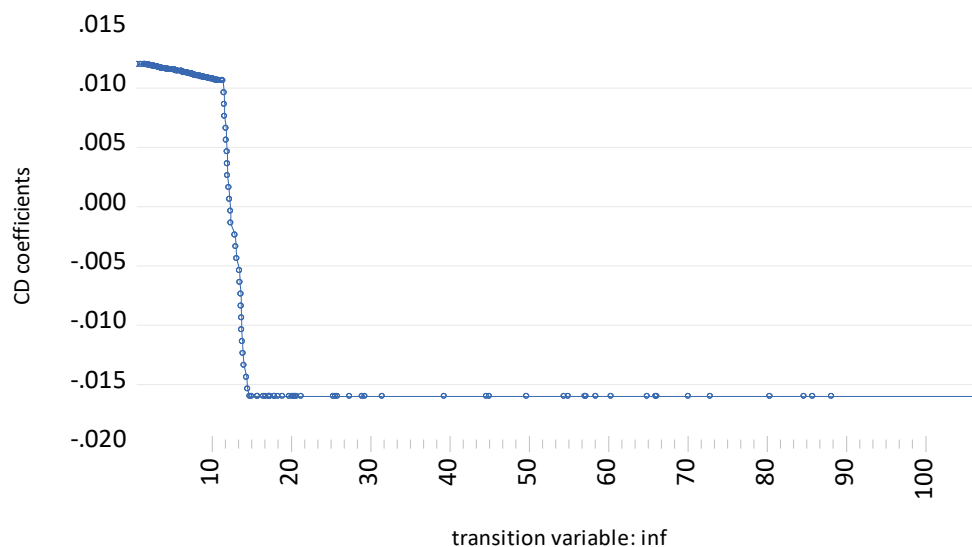


Figure 1. The Effect of Financial Development on the Economic Growth in Different Inflationary Regimes

Source: Research finding.

The variables of physical capital and labor force in both regimes have a positive significant effect on GDP, but in the second regime, it has been reduced via reaching higher inflation rates and passing thresholds for both variables. Rising inflation will reduce the productivity of the factors of capital and labor. Consequently, the production will decrease, which is consistent with the results and the reduction of the positive effect of these two variables (capital and labor) on the second regime.

The trade openness variable in the first regime has a positive effect on economic growth, yet this effect is non-significant. However, by passing the threshold, this will be a negative significant effect. Indeed, trade openness will expand markets, and facilitate trade among the countries. According to Hadian and Izadi (2014), Fischer (1993) argued that trade openness led to adopting policies that reduced the disruption. It also helps maintain economic stability

and increase the competitive strength of domestic firms in global markets through major macroeconomic management. In developing countries, the increase in imports of intermediary goods will lead to economic growth. Results of the first regime are consistent with the theoretical discussion on the positive impact of trade openness on economic growth. Yet by reaching the high inflation rates and passing the threshold, rising inflation will increase the domestic prices, and a reduction in the power of domestic firms to compete in global markets and reduction of domestic GDP, since developing countries provide intermediary goods for production through imports and rising inflation, will rise the intermediary import prices and the production costs, and thus negatively affect the production. Indeed, based on the mentioned facts, results for the second regime can be justified.

Based on the significance level of the coefficients, and also based on the research literature, it can be stated that the results are under expectations and the economic theories.

According to Hadian and Izadi (2014), in Iran, the positive relationship between financial development and economic growth in the inflationary periods confirmed the results of this research on the linear regime (low inflation). Results of Barnes (2001), Bruno and Easterly (1998), and Huybens and Smith (1994) showed a negative relationship between the financial development, and the credits confirmed the current research results in terms of the nonlinear regime (high inflation rate). On the other hand, results of Wang and Mansor (2011), and Njindan and Odhiambo (2017) indicate the nonlinear relationship between the financial development and economic growth at the various levels of inflation, which are in line with those of the present research in both linear and nonlinear regimes for D-8 Countries.

According to the World Bank (2017), reported inflation rates in Malaysia, and Indonesia (except for the years 2019 and 2020, when there would be a very high inflation in these countries followed by a sharp decline in production per capita) and in Bangladesh will be below the threshold during the study period, and financial development in these countries will have a positive effect on their growth due to their low inflation rate. In Pakistan during the last decade, except for 2008, the inflation rate dropped from 20% to 7% over the period 2007–2011, still above the estimated threshold. But then, the inflation rate has gone down, and since 2012, the inflation rate for the country was the same as that of the past decades. In the past 15 years, the inflation rate in this country has been declining, yet for the past decade, the prethreshold results are confirmed. In Nigeria, over the period 2010–2012, the prethreshold outcomes and the positive effect of financial development were implemented on economic growth. In Egypt, over the period 1995–2008, the inflation rate was lower than the estimated threshold in the model. The only country where the inflation rate is higher than the estimated threshold in the study period except for 1990, 2001, and 2010 is Iran. The inflation rate is high in this country, so that financial development cannot be achieved, and has negative effects on GDP. For further explanation, in 2010, the inflation rate dropped from 13.5% to 10.13% at the same time with the financial development rising from 51.36% to 54.03%, which was followed by GDP growth from 17162.05 to 17983.83 (an increase of 4.54% in GDP per capita). Therefore, it is necessary to implement the inflationary adjustment policies before implementing the country's financial development policies.

Model Diagnostic Tests

To ensure the reliability of the results, a series of tests have been applied: 1. the heteroscedasticity test, which indicates that the probability values of the F- and χ^2 - statistics are 0.89 and 0.87, respectively, confirming the null hypothesis and lack of heteroscedasticity in the model, 2. autocorrelation test, whose χ^2 -statistic with a value of 0.76 confirms the null hypothesis and lack of autocorrelation in the model, and 3. granger causality test that shows the long-run relationship between the variables.

Table 10. Unit Root Test of Residuals

	Linear section	Nonlinear section
	(Probability value) t-statistics	(Probability value) t-statistics
Levin–Lin–Chu test	-5.32 (0.000)	-4.56 (0.000)

Source: Research finding.

Conclusion

In this paper, via the nonlinear panel approach and the use of data from selected developing countries over the period 1990–2017, the asymmetric behavior of economic growth (GDP) versus financial development at different inflation rates has been tested using the panel smooth transition regression model (PSTR). Results confirmed the nonlinear relationship between economic growth and financial development. Inflation by passing the threshold estimated as 11.88, along with a transition rate of 0.93, will pass from the first regime to the second regime, and causes the transition and the creation of a nonlinear relationship in the model. Based on the results, the effect of financial development on the linear regime before reaching the threshold of inflation rate was positive and significant, and by passing the threshold and reaching high inflation rate was negative and significant. Results for the first regime are consistent with Njindan and Odhiambo (2017) at a low inflation rate for Nigeria. Besides, the results of another study by De Gregorior and Guidotti (1995) are in line with the results obtained for the nonlinear regime on the negative impact of financial development on economic growth at high levels of inflation. Indeed, this indicates that the effect of financial development on inflationary conditions negatively affects economic growth, and the more inflation increases, the more negative consequences increase. Concerning the variables of capital and labor, inflation will reduce the productivity of these factors, which will also reduce their positive impact on growth. This reduction is reasonable for these two variables; the increase in inflation due to increasing uncertainty and the cost of financing firms reduce production and productivity. An increase in the inflation rate brings the real rate of return down to not only money but also all assets in general. Implicit reductions in real returns exacerbate the credit market friction which leads to credit rationing and increases inflation. Therefore, the financial sector lends less, the allocation of resources is less efficient, and the activity of financial intermediaries is reduced as a result of the negative consequences for investment.

Although the goal of financial development is to help growth by increasing savings and injecting investment into the economy, the inflationary condition reduces the real interest rate, and decreases the incentive for saving, and consequently increases the withdrawal of deposits from the financial system, which will eventually lead to a reduction in production and will negatively affect the economic growth. Hence, this research indicated that low and constant inflation was very important for economic and financial growth. On the other hand, high levels of inflation will harm economic activity by reducing investment productivity growth. Developed financial systems make optimal use of available financial resources through proper financial information and evaluation. However, an efficient financial system requires a low level of inflation because the high inflation rate makes economic growth difficult or impossible by weakening financial growth. Therefore, financial policymakers must control inflation and achieve optimal levels before applying financial instruments and implementing financial development policies to achieve the desired goal of sustainable economic growth.

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