Inflation targeting via monetary policy corridors: a study of international experiences (Egypt, New Zealand, Turkey and Brazil) during the period (1990- 2020)[1]

Dr. Nashwa Mohamed Abdrabow
Department of Economics and Public Finance, Faculty of Commerce
Tanta University, Tanta, Egypt
nashwa.abdrabow@commerce.tanta.edu.eg

Dr. Farouk Fathy Elgazzar
Department of Economics and Public Finance, Faculty of Commerce
Tanta University,Tanta, Egypt
farouk.elgazar@commerce.tanta.edu.eg

ABSTRACT

Inflation targeting is a framework for achieving the ultimate goal of monetary policy. Many countries have shown that the inflation targeting mechanism is an effective system for managing monetary policy in its endeavor to achieve general price stability. This study aims at introducing the inflation targeting policy, defining monetary policy corridors and presenting the necessary requirements for the successful implementation of this policy. The researchers used the Autoregressive Distributed Lag (ARDL)model based on the data of the World Bank during the period from 1990-2020. The research concluded that in Egypt, the exchange rate and money supply are the two most influential paths in targeting inflation. As for New Zealand, the interest rate and money supply are the two most influential tools in targeting inflation. In Turkey, the interest rate, exchange rate and money supply are the most influential paths in targeting inflation. As for Brazil, the exchange rate and the interest rate are the two most effective tools for targeting inflation. This study recommends those in charge of monetary policy in thoses countries to focus on the most important variables in influencing inflation, which represent channels through which inflation can be targeted.

Keywords: *Monetary Policy –Corridors- Inflation targeting- ADRL model.*

[1] Received in 4/3 /2023, accepted in 17/4/2023.

1. INTRODUCTION

According to the Fisher hypothesis, regulating the money supply is crucial for preserving economic stability since it slows the pace of inflation. Macroeconomic policy includes this structure, which is known as monetary policy.

Monetary policy means the set of measures taken by the central bank in order to achieve economic stability by achieving stability in the general level of prices, increasing employment, economic growth. Many channels are used to convey the impact of monetary policy to target inflation, these channels include the exchange rate, deposit interest rate, loan interest rate (Amrial et al., 2019).

The tools used differ from one country to another (quantitative and qualitative), (direct and indirect), according to the economic conditions the country is going through, the efficiency of the banking system, and the degree of development of the financial markets.

High inflation has negative effects on society as a whole, particularly low-income families, including increases in spending, a decline in the purchasing power of the national currency, real profit decrease in business , a decline in output volume, an increase in unemployment, and an increase in interest rates that lead to an increase in credit, all of these factors raise the number of failing businesses and worsen the economic crisis, additionally, high inflation rates reduce the competitiveness of products in the country , which impedes economic expansion (Abuselidze, 2019).

Expectations of inflation have a significant impact on macroeconomic outcomes, including consumer spending and company and household pricing setting. Therefore, one of the main tools of monetary stabilisation policy is to influence the market's expectations of future inflation, the central bank's capacity to influence and coordinate the inflation expectations of market participants will be key to this tool's effectiveness (Falck et al., 2021).

The world's top developing economies continue to use the same approach to promote economic growth and to increase the level of inflation to the targeted index, There is a different situation in most of developing countries, where local currency devaluation leads to inflationary pressure and necessitates stringent policies, All countries strive to fight inflation, but they are wary of deflation,

which has a similarly detrimental effect on the economy Although this seems a little counterintuitive, that is precisely the challenge of monetary policy (Abuselidze, 2019).

According to Robert Lucas, the 1996 recipient of the Nobel Prize in economics, this phenomena inflation is significantly more problematic for society than unemployment since, whereas inflation affects whole society, unemployment is harmful for those who do not work.

Central banks and monetary authorities have recently paid close attention to inflation rates (Okimoto, 2019), Since 1995, at least 27 developing countries have adopted inflation targeting as their official monetary regime (Stojanovikj, 2022).

2. RESEARCH PROBLEM AND METHODOLOGY

The research problem lies in the danger posed by inflation to achieve economic stability in developed and emerging market economies.Therefore central banks use different monetary policy tools to stabilize the general level of prices.so the research problem is summarized in answer the next question, what are the channels through which monetary policy affects inflation targeting? And are these channels the same in the different countries in the study?

Then the researchers used the Autoregressive Distributed Lag(ARDL)model to reach the channels through which inflation can be targeted, The measure of INF annual inflation rate as measured by the consumer price index as a dependent variable, while the independent variables are The official exchange rate EXRATE, Real GDP growth rate GDPg, the money supply as a percentage of GDP BRDM_GDP, The interest rate on deposits DEINTERST, and the research on inflation targeting (study of international experiences) in Egypt, New Zealand, Turkey and Brazil during the period from 1990-2020.

3. PREVIOUS STUDIES

The study by Kumar & Pradyumna (2020) stressed contractionary monetary policy is more effective at bringing down inflation in India. Monetary policy operates through two channels: the credit channel and the equity price channel.

In a study by Angelina & Nugraha (2020) it analyzed the impact of the money supply, the money supply over the preceding period, the exchange rate, on inflation in Indonesia. The study's findings showed that, the money supply had a

significant and positive impact on inflation, as well as a significant and positive impact on inflation during the previous period, and the exchange rate had a positive impact on inflation.

Another study by Amrial et al. (2019) stressed Indonesia's monetary policy has responded to the problems of unemployment and inflation in an effective manner. The study suggested that the central bank adopt a more effective policy to shift from the monetary sector to the real sector in order to successfully tackle the challenges of inflation because it causes a greater response than unemployment. It also suggested that Indonesia needed to step up its policies to address supply-side issues. As a result, profit-sharing-based instruments might be utilised as the ideal replacement for interest-based ones, and this could be accomplished by enacting monetary policy based on Islamic principles.

In a study by Kharbutli (2020) it analyzed the role of monetary policy corridors to target inflation in Egypt, found the high relative importance of the exchange rate corridor compared to the interest rate, domestic credit to the private sector, or the money supply.

The study by Wagdy & Brody (2019) stressed it is not possible to apply the inflation targeting policy in Brazil because it does not meet its initial conditions, the most important of which is the independence of the central bank.

The study by Azad& Serletis (2022) stressed that uncertainty in U.S. monetary policy has a has a negative and statistically significant on inflation targeting policy in emerging economies. (Brazil, Chile, Colombia, Indonesia, Mexico, Poland, and South Africa), that higher U.S. monetary policy uncertainty has a negative effect on output growth and the stock market in emerging economies.

Another study by Nasir et al. (2020) stressed the exchange rate pass-through (ERPT) has significant implications for inflation expectations. money supply, labour market outlook, Economic growth, oil price also showed a considerable impact on inflation expectations.

In a study by Bosiala (2019) it analyzed the relationship between inflation and monetary policy tools in Algeria found a significant positive relationship between money supply and inflation, in line with the view of the monetary school, which argues that inflation increases with monetary growth.

The study by Mishra & Dubey (2022) concluded that there is an indirect positive impact of inflation targeting on financial stability in emerging market economies. Also, inflation targeting countries are able to attract more FDI inflows than non-inflation targeting countries.

The study by Cavoli & Rajan (2008) in Indiastressed that the degree to which exchange rates should be controlled under an inflation targeting system has its bounds. Why? First, attempting to curb the inflationary consequences of exchange rate fluctuations effectively entails hiking interest rates in times of weaker exchange rates and vice versa in times of stronger exchange rates, the central bank will need to predict short-term exchange rate movements.

The study by Chatziantoniou et al. (2017) concluded that higher short-term interest rates of the UK induce the stock market to remain at the high-volatility regime, confirmed on the importance of the general economic conditions for the conduct of monetary policy in the UK economy.

4. MONETARY POLICY AND INFLATION TARGETING

4.1 Types of Monetary Policy

4.1.1 Expansionary Monetary Policy

Used in the event of an economic depression, this policy is represented in increasing the money supply through the central bank lowering the discount rate, reducing the legal reserve ratio, or purchasing securities. This increases the ability of banks to grant credit and create deposits, and thus increases the money supply in the economy.

4.1.2 Contractionary Monetary Policy

Used in the event of inflation. This policy is to reduce the money supply through the central bank. By raising the discount rate, raising the legal reserve ratio, or selling securities. This limits the ability of banks to extend credit and create deposits, the money supply in the economy decreases (Wagdy & Brody, 2019).

4.2 Definition of inflation targeting

Inflation targeting policy is a system of monetary policy characterized by declaring the official goal or a quantitative target for the inflation rate over a

period of time with the apparent declaration that achieving and stabilizing inflation in the long term is the first goal of monetary policy.

Inflation targeting policy is a new and modern method for central banks to manage their monetary policy, focusing on the inflation rate directly as an intermediate target for monetary policy, while the ultimate goal is to achieve price stability in the long term(Ali& Elfaki, 2021).

4.3 Monetary policy Corridors

The effects of monetary policy are transmitted to the rest of the macroeconomy through so-called transmission corridors. Although economic schools differ on the role of monetary policy in the economy. However, there is agreement that monetary policy in its basic content works to control the money supply. In order to achieve the target growth rate while maintaining price stability.

4.3. 1 Interest rate Corridor

When an expansionary monetary policy is followed, this results in an increase in the money supply, and this pushes the real interest rates in the money market to decline, that is, a decrease in the cost of capital, which results in an increase in both consumer and investment spending and then an increase in aggregate demand and output. In the case of a contractionary monetary policy, i.e. a reduction in the money supply, this pushes up real interest rates, raising the cost of capital, and reducing investment demand, aggregate demand, and output (Al-Khartoubli, 2020).

This method appeared in the 1980s, when the rates of demand for money deviated from the expected path of the speed of innovations and financial innovations. This represented the use of the US interest rate as an intermediary target for the increase in random shocks in the monetary sector. This policy is rooted in the Keynesians' notion that it is preferable to fix the interest rate as low as possible. Although critics rejected this because of the importance of money to them (Khalifa, 2020).

4. 3. 2 EXCHANGE RATE CORRIDOR

Targeting the exchange rate takes two forms. The first form is characterized by fixing the exchange rate of the local currency with the exchange rate of another country's currency that is more stable in the price level. Since inflation rates

cannot deviate far from the inflation rate in the country to which the exchange rate is pegged. The second form allows the fixed exchange rate to fluctuate in a given range, provided that the Central Bank intervenes in the event of a deviation outside the limits of the permissible range (Ali & Elfaki, 2021).

The exchange rate affects the supply side, where the depreciation of the local currency leads to an increase in the prices of imported raw materials, which prompts projects to increase the prices of local commodities, it follows that the rate of inflation will increase if the level of aggregate demand does not change. The exchange rate also affects the demand side, as the decline in the value of the currency leads to a decrease in export prices and an increase in import prices, which results in the growth of exports and an increase in both aggregate demand and output, Inflation rates increase.

4. 4 CONDITIONS FOR THE SUCCESS OF THE INFLATION TARGETING POLICY

4.4.1 The independence of the Central Bank

Granting enough autonomy to central banks allows them to be free to use their monetary tools to hit their target inflation rate. This means that the central bank has clearly defined and prioritized objectives, and to grant sufficient authority and independence to achieve its objectives and functions, and to be held accountable in order to increase the credibility and effectiveness of monetary policy.

4.4. 2 Regulating public finances

A strong financial position is necessary in order to enter the inflation targeting system, large budget deficits and government debt can lead to uncontrollable inflation and the abandonment of inflation targeting. Fiscal policy can influence monetary policy, in countries that suffer from structural financial imbalances. Major fiscal reforms are needed to rebalance the government budget and reduce public debt, which is a condition for adopting inflation targeting.

4.4.3 A PERFECT FINANCIAL SYSTEM AND UNDERSTANDING OF TRANSFER MECHANISMS

When implementing monetary policy, the central bank needs to assess the impact of its decisions.as well as estimating the time required before it affects the economy. This is of great importance in adopting the inflation targeting system, for example. The authorities need to know to what extent interest rate movements are transmitted from the central bank to banks' borrowing rates and lending rates. Monetary policy can only be effective when policy makers understand the transmission channels properly and act effectively.

4.4. 4 INFRASTRUCTURE AND ADVANCED TECHNOLOGY

The necessity of providing high-tech infrastructure that contributes to accurately determining the future inflation rate. As the technical development ensures the fulfillment of expectations with accuracy and high efficiency. This requires the ability to collect data, and knowing how to use it (Abu Karsh, 2016).

5. THE ECONOMETRICS MODEL

5. 1 THE DESCRIPTION OF THE METHODOLOGY USED

Based on the economic theory and previous studies that were previously reviewed, it can be said that many factors or variables affect inflation targeting, and therefore the applied model of research can be formulated as follows, which includes the most important of these factors, which represent monetary policy variables and control variables in one model that is applied to Egypt, New Zealand, Turkey, and Brazil

$$INFt = Bo + B1EXRATEt + B2gdpgt + B3\ BRDM\_GDPt + Bs$$
$$DEINTERSTt + Et$$

Whereas :

INF: annual inflation rate as measured by the consumer price index (dependent variable). EXRATE: The official exchange rate (the number of units of the local currency of each country against the dollar) as an instrument of monetary policy.

Gdpg: Real GDP growth rate as a controlling variable.

BRDM_GDP: the money supply as a percentage of GDP as a monetary policy tool.

DEINTERST: The interest rate on deposits was used instead of the real interest rate due to the lack of data on the real interest rate in some countries such as Turkey, New Zealand and Brazil as one of the monetary policy tools

t: time.

E: random error.

The data for the time period from 1990 to 2020 obtained from the Development Indicators data issued by the World Bank.

5.2 The statistical methods used

- Conducting the Phillips and Perron (1988) test to test the stability of the data. This test allows bypassing the two problems of instability of variance for random error and autocorrelation of residuals that the Dickey-Fuller test suffers from.
- If the variables are all integrals of the first order I (I), we will run the Johanson test for cointegration (Johansen 1991).But if it is integrated from different orders, some of them are I (I) and others are I (O) or I (2) we will estimate the model by (ARDL) method for Pesaran & Shin (1998) and then conduct the Bounds test to test the existence of a long-term relationship Pesaran & Shin et al. (2001) cointegration, which allows analyzing the relationship in the long and short term in one equation and it can be applied to small samples and takes a sufficient number of slowing periods to get the best set of data from the base model (Aderbush 2013, p. 158).
- If the null offer of the boundary test is rejected, which states that there is no co-integration between the variables, we estimate the model using (ARDI) and estimate the Error correction coefficient (EC) in addition to estimating the long-run coefficients and the short-run coefficients.

(1)Time series stability test: which aims to examine the properties of time series separately to determine their stability through testing the null hypothesis Ho: $\lambda = 0$, meaning there is a unit root in the time series. In contrast to the alternative hypothesis H1: $\lambda < 0$ that is, the time series does not have a unit root Al Naqa

(1999) and the test was done using the pp test for the unit root. The results were as follows for each country in order.

Table 1: Egypt Unit root (pp) test results using Eviews.9

variable	pp test						decision
	level			first difference			
	Bandwidth	direction	Adj. t-Stat Prob.*	Bandwidth	direction	Adj. t-Stat Prob.*	
INF	0	constant	-2. 91(0.055)	7	constant	-7.33(0.00)	I(0)
EXRATE	4	constant	-0.124 (0.93)	7	constant	-3.83(0.006)	I(1)
GDPG	1	constant	-3.31 (0.023)	0	constant	-7.91 (0.000)	I(0)
BRDM_GDP	1	constant	-2.23 (0.199)	3	constant	-4.14 (0.003)	I(1)
DEINTERST	11	constant	-1.596 (0.472)	21	constant	-5.838 (0.000)	I(2)

Source: prepared by the researchers using Eviews9 program

Table 2: Turkey Unit root test results using Eviews.9

variable	pp test						decision
	level			first difference			
	Bandwidth	direction	Adj. t-Stat Prob.*	Bandwidth	direction	Adj. t-Stat Prob.*	
INF	3	constant	-0. 927 (0.67)	2	constant	-5.30 (0.000)	I(1)
EXRATE	3	constant	3.99 (1.00)	0	constant	-6.44(0.000)	I(2)
GDPG	0	constant	-5.91 (0.000)	18	constant	-21.67 (0.000)	I(0)
BRDM_GDP	18	constant	0.312 (0.975)	24	constant	-11.48 (0.000)	I(1)
DEINTERST	3	constant	-0.842 (0.792)	2	constant	-7.65 (0.000)	I(1)

Source: prepared by the researchers using Eviews9 program

Table 3: New Zealand Unit root test results using Eviews.9

variable	pp test						decision
	level			first difference			
	Bandwidth	direction	Adj. t- Stat *. Prob	Bandwidth	direction	Adj. t-Stat Prob*.	
INF	2	constant	-4.89 (0.000)	18	constant	-14.41 (0.000)	I(0)
EXRATE	0	constant	-1.606 (0.467)	4	constant	-3.630.011)	I(1)
GDPG	2	constant	-3.157 (0.032)	2	constant	-5.876 (0.000)	I(0)
BRDM_GDP	4	constant	0.883 (0.993)	2	constant	-5.149 (0.000)	I(1)
DEINTERST	2	Constan	-3.96 (0.021)	17	constant	-8.222 (0.000)	I(0)

Source: prepared by the researchers using Eviews9 program

Table 4: Brazil Unit root pp test results using Eviews.9

variable	pp test						decision
	level			first difference			
	Bandwidth	direction	Adj. t-Stat *.Prob	Bandwidth	direction	Adj. t-Stat *.Prob	
INF	3	constant	-1.82 (0.361)	1	constant	-7.11 (0.000)	I(1)
EXRATE	2	constant	0.052 (0.956)	1	constant	-3.177(0.031)	I(1)
GDPG	2	constant	-3.750 (0.008)	9	constant	-9.995 (0.000)	I(0)
BRDM_GDP	4	constant	-1.144 (0.684)	28	constant	-8.762 (0.000)	I(1)
DEINTERST	3	constant	-7.417 (0.000)	28	constant	-30.62 (0.000)	I(0)

Source: prepared by the researchers using Eviews9 program

6. COMMENTING ON PREVIOUS TABLES

We note from the previous results that the study variables are a mixture of integrated variables between the first rank, 1 (I) and variables of the zero rank I (0) and variables of the second rank, i.e. (I(2). For Egypt, the null hypothesis was rejected with respect to both the inflation rate and the economic growth rate at a level of significance less than 5%,10%, and in the first difference at a level of significance less than 1%, which indicates that these variables are integrated from the I (0) rank.It was not possible to reject the nihilistic hypothesis which says that there is a unit root for the exchange rate variable and the money supply at a level of significance of 5% or less, but it was rejected for the same variables in the first difference at a level of significance less than 1%, which means that it is integrated of the first order I (I) , and for the interest rate, it is integrated from rank 1(2) . As for Turkey, the nihilistic hypothesis was rejected in relation to the economic growth rate at a level of significance less than 5%, and in the first difference at a level of significance less than 1%, which indicates that this integrated variable is of rank I (0). It was not possible to reject the nihilistic hypothesis that there is a root of unity for the interest rate , inflation rate and money supply at a level of significance of 5% or less, but it was rejected for the same variables in the first difference at a level of significance less than 1%, which means that they are integrated of first order I (I) and for the exchange rate variable it was found that it is integrated of order I (2). As for New Zealand, the null hypothesis was rejected with respect to the inflation rate, the economic growth rate, and the interest rate at a level of significance less than 1%, 5%, and in the first difference at a level of significance less than 1%, which indicates that these variables are integrated from the I (0) order. It was not possible to reject the nihilistic

hypothesis which says that there is a unit root for the exchange rate variable and the money supply at a level of significance of 5% or less, but it was rejected for the same variables in the first difference at a level of significance less than 1%, which means that it is integrated of the first order I (I). And for Brazil The nihilistic hypothesis was rejected with respect to both the interest rate and the economic growth rate at a level of significance less than 1% 10%, and in the first difference at a level of significance less than 1%, which indicates that these variables are integrated from the I (0). It was not possible to reject the nihilistic hypothesis which says that there is a unit root for the exchange rate variable, the inflation rate and the money supply at a level of significance of 5% or less, but it was rejected for the same variables in the first difference at a level of significance less than 1%, which means that they are integrated of the first order I (I).

(2) Based on the results of the unit root test described previously, we can use the ADRL model for distributed time gaps, as the general framework model of ARDL takes a sufficient number of time lags to get the best estimate as shown in the results below and we determine the number of periods The optimal deceleration is based on the lowest value of the Schwarz and Akaike criteria, and the general model takes the following formula (Aderbush, 2013, p. 164)

$$\mathrm{INF}_t = \alpha_0 + \sum_{t=i}^{n} B_i(\mathrm{INF})_{t-i} + \sum_{J=0}^{m} \sigma_J(\mathrm{EXRATE})_{t-j}$$

$$+ \sum_{J=0}^{m} \sigma_J\,(GDPG)_{t-j} + \sum_{J=0}^{m} \sigma_J\,(\mathrm{BRDM\_GDP})_{t-j}$$

$$+ \sum_{J=0}^{m} \sigma_J\,(De\mathrm{INTERST})_{t-j} + U_t$$

Where n is the number of periods of slowing down of the dependent variable, which is the rate of inflation.

m: the number of slowdown periods for the independent variables, which are the exchange rate, economic growth, money supply, government spending and interest rate. The optimal number of lag times is determined by the lowest value

of the AIC criterion, so the model writes ARDL(n, m) ie an ARDL model of order (n, m).

In order to estimate the model, it is necessary first to determine the optimal number of delay periods, n, m, for the independent variables and the dependent variable, respectively, which are necessary so that the residuals are not serially related and that they are fixed in variance. Choosing the model that makes the value of the AIC the least possible. This was done by estimating the model 768 times and by comparing the corresponding values of the AIC statistic. The model (2,1,2,1,0) ARDL was chosen for Egypt as well as the rest of the countries, New Zealand, Turkey and Brazil, and this is illustrated by the graphics And the following results

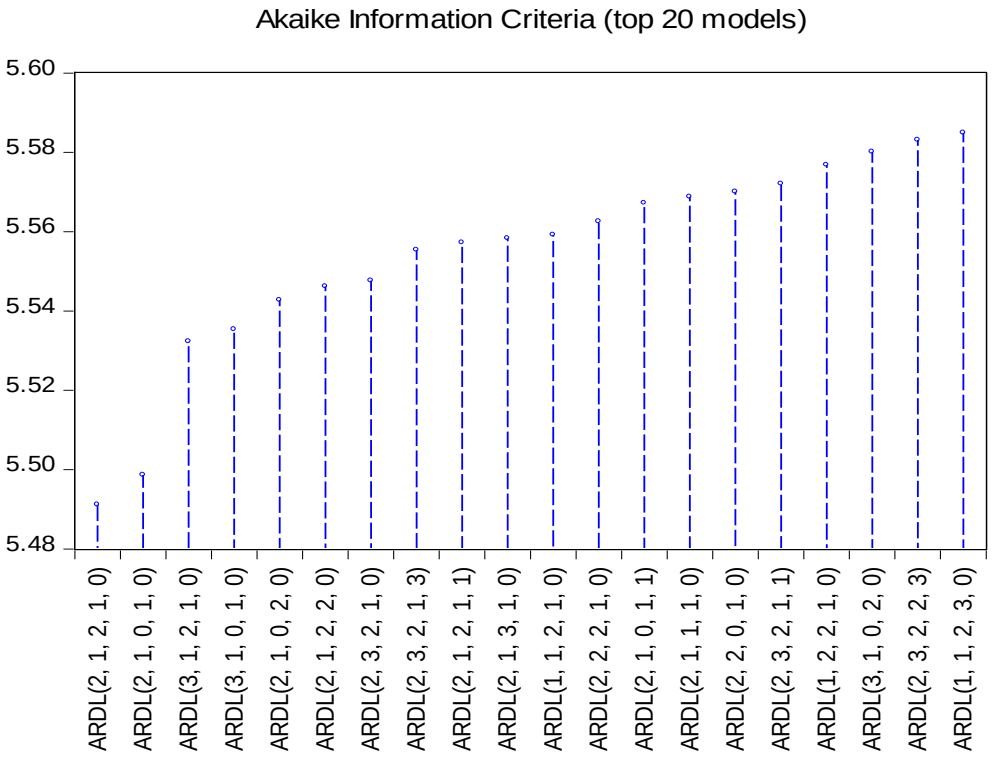

Figure 1: Egypt

Source: output program Eviews 9.

To verify the existence of a long-term relationship (Co-integration) between the variables of the model, we conduct the Bounds test by using a (Joint F-statistic) to test the hypothesis Ho: B1 = B2 = 0, which states that there is no joint integration between The model variables, i.e., the absence of a long-term equilibrium relationship against H1: B1 ≠ B2 ≠ 0 The alternative hypothesis, which states that there is a co-integration relationship between the model variables, where the calculated value of the statistic (f) is compared with the critical tabular values presented by Pesaran & Al (2001). The following table shows the result of this test for Egypt

Table 5: The result of the border test (the case of Egypt)

k	Value	Test Statistic
4	2.867	F-statistic
Critical Value Bounds		
I1 Bound	**I0 Bound**	**Significance**
3.09	2.2	10%
3.49	2.56	5%
3.87	2.88	2.5%
4.37	3.29	1%

Source: output program Eviews 9.

From the table, we notice that the common F statistic for the boundary test is 2.86, which is less than the critical values for the upper bound at almost most levels of significance. Therefore, we can say that there is no co-integration relationship, that is, a long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in Egypt.

Table 6: The result of estimating the ARDL model for the case of Egypt

Prob.*	Coefficient	Variable
0.055	0.309	INF(-1)
0.088	0.246	INF(-2)
0.000	2.574	EXRATE
0.000	-2.678	EXRATE(-1)
0.041	0.306	BRDM_GDP(-1)

Source: output program Eviews 9.

From the previous table, we derive the following equation

$$INF =+ 0.309\ INF\ (-1) +0.246\ INF\ (-2) + 2.57\ EXRATE - 2.67\ EXRATE\ (-1) + 0.306BRDM\_GDP\ (-1)$$

From the previous equation and the previous table, we note: An increase in the exchange rate by 1% in one period leads to an increase in inflation in the same period by 2.57% and a decrease in the following period by 2.67%. As for the gross domestic product, there is a very weak (not significant) positive relationship with inflation for the same period, one lag period and two lag periods As for the money supply, its increase by 1% in one period leads to an increase in inflation for the next period by 0.306%, which is a positive and significant relationship that agrees with economic theory and previous studies.

For New Zealand To estimate the model, it is necessary first to determine the optimal number of delay periods, n, m, for the independent variables and the dependent variable, respectively, which are necessary so that the residuals are not serially related and that they are fixed in variance. Choosing the model that makes the value of the AIC the least possible. This was done by estimating the model 768 times and by comparing the corresponding values of the AIC statistic, the model (3,2,2,2,3) ARDL was selected.

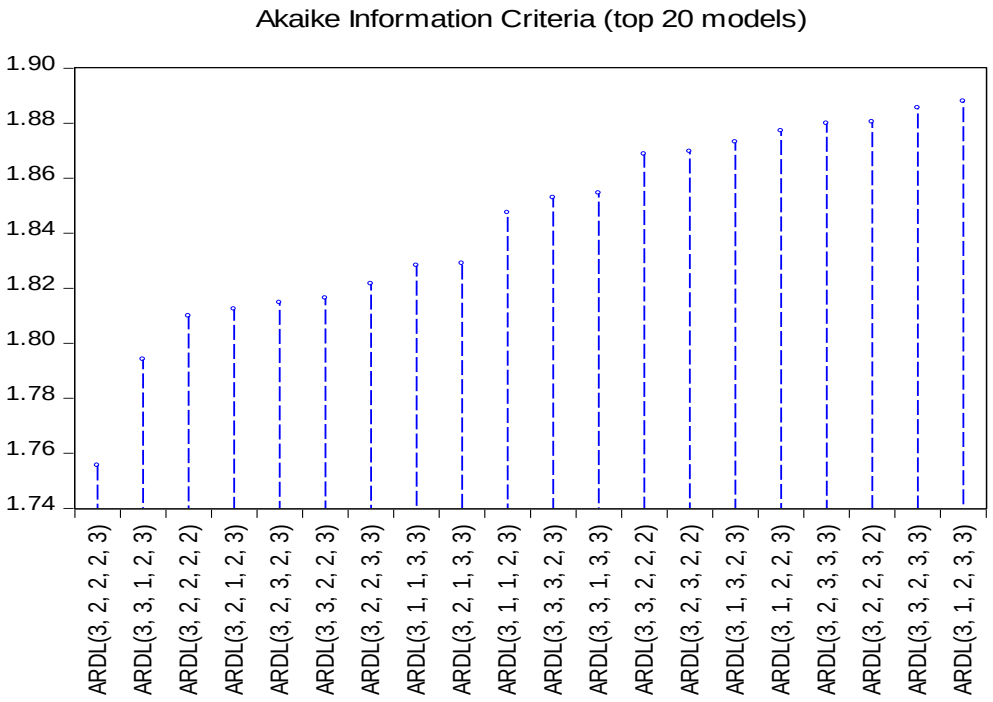

Figure 2: New Zealand

Source: output program Eviews 9.

Table 7: New Zealand Border Test Result

k	Value	Test Statistic
4	1.628	F-statistic
Critical Value Bounds		
I1 Bound	**I0 Bound**	**Significance**
3.09	2.2	10%
3.49	2.56	5%
3.87	2.88	2.5%
4.37	3.29	1%

Source: output program Eviews 9.

From the table, we notice that the common F statistic for the boundary test is equal to 1.62, which is less than the critical values of the upper bound at all levels of significance. Therefore, we can say that there is no co-integration relationship, that is, a long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in New Zealand.

Table 8: Estimation results (New Zealand ARDL)

Prob.*	Coefficient	Variable
0.024	-0.406	INF(-3)
0.001	-0.610	GDPG
0.006	-0.580	GDPG(-1)
0.009	-0.223	BRDM_GDP(-2)
0.003	0.699	DEINTERST
0.001	-0.762	DEINTERST(-2)
0.062	16.172	C

Source: output program Eviews 9.

From the previous table, we derive the following equation

INF = -0.406 INF (-3) - 0.610 GDPG -0.580 GDPG (-1) - 0.223 BRDM_GDP(-2) + 0.699 DEINTERST- 0.762 DEINTERST(-2).

From the previous equation and the previous table, we note: As for the GDP, there is an negative relationship with inflation for the same period and for one lag period. This means that an increase in GDP by 1% leads to a decrease in inflation of 0.61% for the same year and 0.58% after a year. As for the money supply, its increase by 1% in a period which leads to a decrease in inflation after two periods, 0.22%, which is a significant negative relationship. It also appears from the results that there is a positive and significant relationship between the interest rate and inflation for the same period, which turns into an negative after two slowdown periods.

for Turkey To estimate the model, it is necessary first to determine the optimal number of delay periods, n, m, for the independent variables and the dependent variable, respectively, which are necessary so that the residuals are not serially related and that they are fixed in variance. Choosing the model that makes the value of the AIC the least possible. This was done by estimating the model 768

times and by comparing the corresponding values of the AIC statistic, the model (2,2,3,3,3) ARDL was chosen

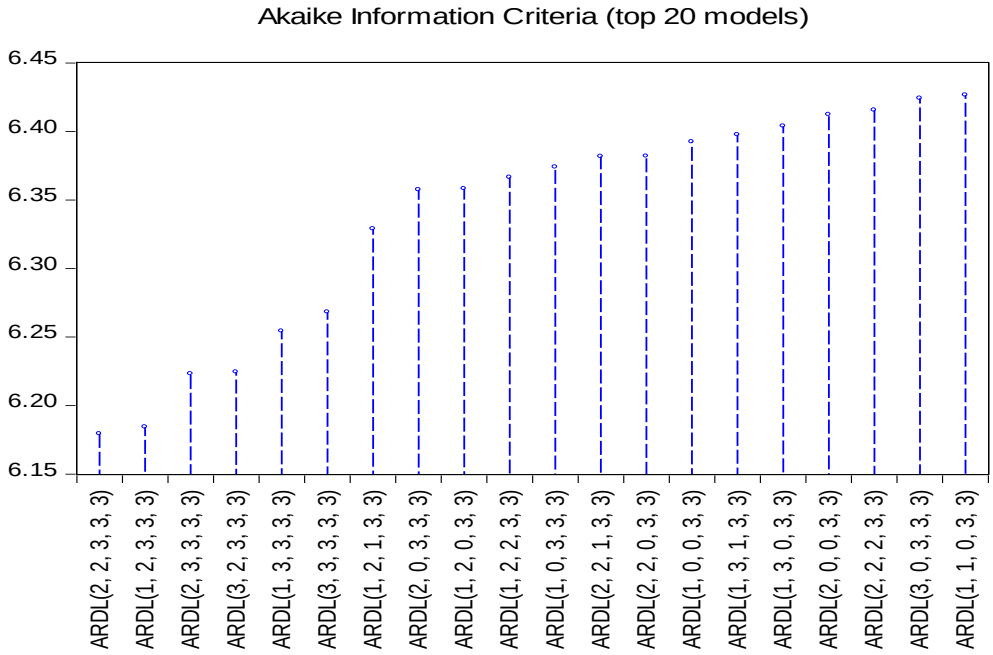

Figure 3: Turkey

Source: output program Eviews 9.

Table 9: the results of the border test for Turkey

k	Value	Test Statistic
4	1.537	F-statistic
Critical Value Bounds		
I1 Bound	**I0 Bound**	**Significance**
3.09	2.2	10%
3.49	2.56	5%
3.87	2.88	2.5%
4.37	3.29	1%

Source: output program Eviews 9.

From the table, we notice that the common F statistic for the boundary test is equal to 1.53, which is less than the critical values of the upper bound at all levels of significance. Therefore, we can say that there is no co-integration relationship, any long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in Turkey

Table 10: ARDL test result for Turkey

Prob.*	Coefficient	Variable
0.080	16.802	EXRATE(-2)
0.086	-0.591	GDPG(-3)
0.015	1.303	BRODM_GD(-1)
0.001	-2.101	BRODM_GD(-2)
0.004	1.549	BRODM_GD(-3)
0.000	1.844	DEPINTRST
0.007	-0.628	DEPINTRST(-3)

Source: output program Eviews 9.

From the previous table, we derive the following equation

INF = +16.80exrate (-2) -0.59 GDPG (-3)+ 1.303 BRDM_GDP(-1) – 2.101 BRDM_GDP(-2)+1.54BRDM_GDP(-3)+1.84DEPINTERST-0.62 DEPINTERST (-3).

From the previous equation and the previous table, we note: As for the exchange rate, there is a positive relationship with inflation, and for GDP, there is an negative relationship with inflation for three lag periods. This means that an increase in GDP by 1% leads to a decrease in inflation by 0.59% after three periods of slowdown. As for the money supply, Its 1% increase in A period that leads to an increase in inflation for the next period by 1.3% and a decrease in it after two periods by 2.1% and an increase in it after three periods by 1.5%. As for the interest rate, there is a positive, significant relationship with inflation for the same period that turns into a significant negative relationship after three slow periods.

For Brazil To estimate the model, it is necessary first to determine the optimal number of delay periods, n, m, for the independent variables and the dependent variable, respectively, which are necessary so that the residuals are not serially related and that they are fixed in variance. Choosing the model that makes the AIC value as low as possible. This was done by estimating the model 2500 times

and by comparing the corresponding values of the AIC statistic. The ARDL model (4,4,3,4,4) was chosen.

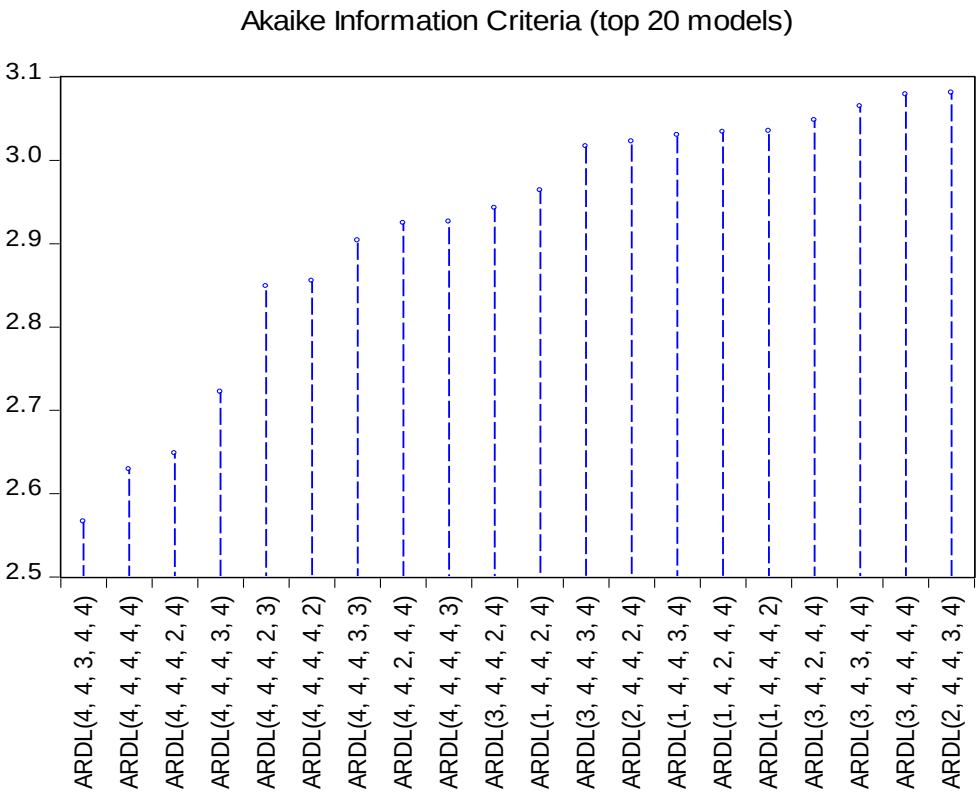

Figure 4: Brazil

Source: output program Eviews 9.

Table 11: results of the border test for Brazil

k	Value	Test Statistic
4	0.543	F-statistic
Critical Value Bounds		
I1 Bound	**I0 Bound**	**Significance**
3.09	2.2	10%
3.49	2.56	5%
3.87	2.88	2.5%
4.37	3.29	1%

Source: output program Eviews 9.

From the table, we notice that the common F statistic for testing the limits is equal to 0.54, which is less than the critical values for the upper bound at all levels of significance. Therefore, we can say that there is no co-integration relationship, that is, a long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in Brazil.

Table 12: ARDL Model Results for Brazil

Prob.*	Coefficient	Variable
0.069	4.110	EXRATE(-4)
0.079	0.665	GDPG(-1)
0.081	-0.005	DEINTRST
0.099	0.004	DEINTRST(-3)

Source: output program Eviews 9.

From the previous table, we derive the following equation

$$INF = + 4.11EXRATE\ (-4) + .665\ GDPG\ (-1) - 0.005DEINTERST + 0.004DEINTERST\ (-3)$$

From the previous equation and the previous table, we note: An increase in the exchange rate by 1% in a period leads to an increase in inflation after four slowdown periods by 4.1%. As for the GDP, there is a positive relationship with inflation for one lag period. This means that an increase in GDP by 1% leads to an increase in inflation by 0.66% after It, also appears from the results that there is a significant negative relationship between the interest rate and inflation for the same year, which turns into positive after 3 slow periods.

Third, the validity and quality of the form

To test the validity and quality of the model, some of the following tests are performed (1) Breusch-Godfrey (BG) Lagrange factorial test for correlation between residuals (BG) LM test in this test null hypothesis Ho: no autocorrelation between residuals against alternative hypothesis H1: there is autocorrelation between residuals (Godfrey,1996). (2) Autoregressive conditional variance test (ARCH). In this test, the null hypothesis Ho: the stability of the variance of the random error term against the alternative hypothesis H1: the instability of the variance of the random error term (Breush,1979). (3) The

normal distribution model for random errors (Jarque-Bera test of normality (JB) where the null hypothesis Ho: random errors follow a normal distribution against the alternative hypothesis H1: random errors do not follow a normal distribution (Jarque, 1987). (4) The test of the estimated model in terms of the functional form of this model (Ramsey RESET test) and in this test the null hypothesis Ho: the model does not suffer from a description error against the alternative hypothesis H1: the model suffers from a description error (Ramsey, 1969). Hence, there is no model, which is tested from the AIC standard, of the serial correlation problem nor the variance instability problem as well as.

Table 13: Results of the model tests for Egypt

test	f- statistic	P - value
Breusch-Godfrey Serial Correlation LM Test	0.672	0.524
Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.621	0.776
ARCH	0.326	0.572
Ramsey t	.690	0.417

Source: prepared by the researchers using Eviews9 program.

Table 14: Results of the model tests for New Zealand

test	f- statistic	P - value
Breusch-Godfrey Serial Correlation LM Test	0.927	0.430
Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.732	0.722
Normality test Jarque – Bera	1.143	.564
Ramsey t	0.293	0.599

Source: prepared by the researchers using Eviews9 program.

Table 15: Results of the model tests for Turkey

test	f- statistic	P - value
Breusch-Godfrey Serial Correlation LM Test	0.570	0.586
Heteroskedasticity Test: Breusch-Pagan-Godfrey	0.393	0.956
Normality test Jarque – Bera	1.092	.578

Source: prepared by the researchers using Eviews9 program.

Table 16: Results of the model tests for Brazil

test	f- statistic	P - value
Breusch-Godfrey Serial Correlation LM Test	7.182	0.255
Heteroskedasticity Test: Breusch-Pagan-Godfrey	3.667	0.155
Normality test Jarque – Bera	0.037	.981

Source: prepared by the researchers using Eviews9 program.

7. RESEARCH RESULTS AND RECOMMENDATIONS

This research on inflation targeting (study of international experiences) in Egypt, New Zealand, Turkey and Brazil during the period from 1990-2020 using (ARDl) model, unit root test and boundary test to measure the existence of a long-term relationship, and the research reached the following results

- **For Egypt**, there is a significant positive relationship between the exchange rate and inflation, as an increase in the exchange rate by 1% in a period leads to an increase in inflation in the same period by 2.57% and a decrease in the following period by 2.67%. As for the GDP, there is a very weak positive relationship (Not significant) with inflation for the same period and for one lag period and for two lag periods. As for the money supply, its increase by 1% in one period leads to an increase in inflation for the next period by 0.306, which is a positive and significant relationship that agrees with the economic theory and previous studies. The results also show that there is an negative relationship Insignificance between the interest rate and inflation for the same period. The results also show the absence of a co-integration relationship, i.e. a long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in Egypt.
- **For New Zealand**, there is an negative relationship between GDP and inflation for the same period and for one lag period. This means that an increase in GDP by 1% leads to a decrease in inflation by 0.61% for the same year and 0.58% after a year. As for the money supply, its increase by 1% In a period that leads to a decrease in inflation after two periods of 0.22%, which is a significant negative relationship. It also appears from the results that there is a positive and significant relationship between the interest rate and inflation for the same period, which turns into an negative after two lag periods. The results

also show the absence of a co-integration relationship, i.e. a long-term relationship between Independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in New Zealand.

- **For Turkey**, there is a positive relationship between the exchange rate with inflation, and for GDP, there is an negative relationship with inflation for three lag periods. This means that an increase in GDP by 1% leads to a decrease in inflation by 0.59% after three lag periods. As for the money supply, its increase By 1% in a period, it leads to an increase in inflation for the next period by 1.3%, and its decrease after two periods by 2.1%, and its increase after three periods by 1.5%. As for the interest rate, there is a positive, significant relationship with inflation for the same period that turns into a significant negative relationship after three slow periods and appears One of the results is also the absence of a co-integration relationship, i.e. a long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in Turkey.
- **For Brazil**, an increase in the exchange rate by 1% in a period leads to an increase in inflation after four lag periods by 4.1%. As for GDP, there is a direct relationship with inflation for one lag period. This means that an increase in GDP by 1% leads to an increase in inflation b 0.66% after a year. It also appears from the results that there is a significant negative relationship between the interest rate and inflation for the same year that turns into negative after 3 lag periods. The results also show the absence of a co-integration relationship, i.e. a long-term relationship between independent variables and inflation, i.e. between the exchange rate, economic growth, money supply, interest rate and inflation in Brazil.
- In general, **in Egypt**, the exchange rate and money supply are the two most influential paths in targeting inflation. For New Zealand, the interest rate and money supply are the two most influential tools in targeting inflation. In Turkey, the interest rate, exchange rate and money supply are the most influential paths in targeting inflation. Inflation For Brazil, the exchange rate and the interest rate are the two most effective tools for targeting inflation.

- The study recommends those in charge of monetary policy in these countries to focus on the most important variables in influencing inflation, which represent channels through which inflation can be targeted, which was reached from the previous model.

REFERENCES

Abu Karsh, M. S. (2016). The policy of targeting inflation between theory and practice, *Al-Maarefah Journal*, Al-Zaytoonah University, 4, 83- 99.

Abuselidze, G. (2019). Modern Challenges of Monetary policy Strategies: inflation and devaluation influence on Economic Dependent of the country.*Academy of Strategic Management Journal.* 18, 4, 1- 10.

Adrioush, D. M. (2012-2013). *A series of lectures on econometrics*, Djilali Liabis University, Sidi Belias, Faculty of Economics and Commercial Sciences.

Ali, S. H. S., & Elfaki, M. A. (2021). Inflation targeting policy as a framework for managing monetary policy in Sudan: An econometric study during the period (1980-2018) with reference to the experiences of some leading countries. *Journal of economic, management and legal sciences.* 5, 20, 135- 156.

Al-Khartoubli, M. M. Y. (2020). Corridors of monetary policy and inflation targeting. *Scientific Journal of Economics and Trade*, Ain-Shams University.1, 611- 662.

Amrial, A. M., & Arundina, T. (2019). Implementation of dual monetary policy and its relevance to inflation and unemployment in the Phillips curve context in Indonesia. *International Journal of Islamic and Middle Eastern Finance and Management.*12, 5, 680-697.

Angelina, S., & Nugraha, N. M (2020). Effects of Monetary Policy on Inflation and National Economy Based on Analysis of Bank Indonesia Annual Report. *Technium Social Sciences Journal.* 10, 423-435.

Azad, N. F., & Serletis, A. (2022). *Spillovers of U.S. monetary policy uncertainty on inflation targeting emerging economies.* Emerging Markets Review 51, 1- 24.

Bosiala, M.N. (2019). Inflation targeting policy as a framework for managing monetary policy: An econometric study of the case of Algeria during the period 1980-2016. *Journal of Economic and Scientific Research*. 6, 2, 112- 135.

Breush, T.S., & Pagan, A. R. (1979). *Simple test for Hetroesdasticity and Random Coefficient Variation*. Econometrica. 47, 1287-1294.

Cavoli, T., & Ramkishen S. R. (2008). *Open economy inflation targeting arrangements and monetary policy rules Application to India*, Indian Growth and Development Review 1, 2, 237-251.

Chatziantoniou, I. George, F., & Floros, C. (2017). *Asset prices regime-switching and the role of inflation targeting monetary policy. Global Finance Journal.* 32, 97–112.

El Naga, A. A. F. (1999). Using the error-correction model in estimating cash substitution editors in Egypt. *Journal of the Faculty of Commerce for Scientific Research*, Alexandria University, 36, 20, 303-345.

Eviews 9 User's Guide II, ISBN: 978-1-880411-278, 1994-2015, 1 HS Global Inc.

Falck , E., Hoffmann, M., &Hürtgen, P. (2021). Disagreement about inflation expectations and monetary policy transmission. *Journal of Monetary Economics* (118), 15–31.

Godfrey, L.G.(1996). *Misclassification tests and their uses in Econometric. Journal of statistical planning and inference.* (42), 241-260.

Jarque, T. M., & Bera, E.K. (1987). *A test of normality of observation and regression residual.* International statistical review. (55), 163-172.

Khalifa, H. A. K. (2020). Inflation Targeting Policy: Requirements and Application Experiences. *Benghazi Scientific University Journal.* 33 (1), 57- 66.

Kumar, A., Dash, P. (2020). *Changing transmission of monetary policy on disaggregate inflation in India.* Economic Modelling (92), 109–125.

Mishra, A., & Dubey, A. (2022). Inflation targeting and its spillover effects on financial stability in emerging market economies. *Journal of Policy Modeling* xxx (xxxx) xxx–xxx, 1- 21.

Nasir, M. A., Huynh, T. L. D., & Vinh Vo, X. (2020). *Exchange rate pass-through & management of inflation expectations in a small open inflation targeting economy*. International Review of Economics and Finance (69), 178–188.

Okimoto, T. (2019). Trend inflation and monetary policy regimes in Japan. *Journal of International Money and Finance,* (92), 137–152.

Persaran , M. H., Shin, Y., & Smith, R.J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics,* 16 (3), 289 – 326.

Pesaran, M. H., & Shin, Y. (1998). *An autoregressive distributed-lag modelling approach to cointegration analysis*. Econometric Society Monographs, (31), 371-413.

Phillip, P.C.B., & Perron, P. (1988). *Testing for a unit root in time series regression*, Biometrika. (75), 335-346.

Ramsey, J. B. (1969). Tests for distification error in classical linear least squares regression analysis. *Journal of Royal statistical society*. (31) 350-371.

Stojanovikj, M. (2022). *Government size, inflation targeting and business cycle volatility*. Economic Analysis and Policy 74, 1–12.

Wagdy, G., Brody, N. (2019). *Monetary policy and inflation targeting policy: an econometric study of the case of Brazil during the period 1990-2015*.Al-Mishkat magazine in economics and economic- development and law. 5, 10, 98- 117.

World Bank.(2021). World development indicators (WDI).

APPENDIX NO (1)

Table 1: The result of estimating the ARDL model for the case of Egypt

Dependent Variable: INF
Method: ARDL
Date: 10/12/22 Time: 10:22
Sample (adjusted): 1992 2020
Included observations: 29 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): EXRATE GDPG BRDM_GDP DEINTERST
Fixed regressors: C
Number of models evalulated: 768
Selected Model: ARDL(2, 1, 2, 1, 0)
Note: final equation sample is larger than selection sample

Prob.*	t-Statistic	Std. Error	Coefficient	Variable
0.055	2.047	0.151	0.309	INF(-1)
0.088	1.803	0.136	0.246	INF(-2)
0.000	5.625	0.457	2.574	EXRATE
0.000	-5.289	0.506	-2.678	EXRATE(-1)
0.722	0.361	0.563	0.203	GDPG
0.767	0.300	0.522	0.157	GDPG(-1)
0.184	-1.380	0.459	-0.634	GDPG(-2)
0.197	-1.338	0.134	-0.179	BRDM_GDP
0.041	2.193	0.139	0.306	BRDM_GDP(-1)
0.134	-1.568	0.355	-0.558	DEINTERST
0.894	-0.134	8.723	-1.172	C

9.449759	Mean dependent var	0.793016	R-squared
5.731884	S.D. dependent var	0.678025	Adjusted R-squared
5.478379	Akaike info criterion	3.252431	S.E. of regression
5.997009	Schwarz criterion	190.4096	Sum squared resid
5.640808	Hannan-Quinn criter.	-68.43650	Log likelihood
2.146849	Durbin-Watson stat	6.896340	F-statistic
		0.000219	Prob(F-statistic)

*Note: p-values and any subsequent tests do not account for model selection.

Table 2: Estimation results (New Zealand ARDL)

Dependent Variable: INF
Method: ARDL
Date: 10/11/22 Time: 19:32
Sample (adjusted): 1993 2020
Included observations: 28 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): EXRATE GDPG BRDM_GDP DEINTERST
Fixed regressors: C
Number of models evalulated: 768
Selected Model: ARDL(3, 2, 2, 2, 3)

Prob.*	t-Statistic	Std. Error	Coefficient	Variable
0.381	-0.912	0.219	-0.200	INF(-1)
0.170	-1.467	0.198	-0.290	INF(-2)
0.024	-2.608	0.155	-0.406	INF(-3)
0.151	-1.542	1.141	-1.761	EXRATE
0.341	0.995	1.545	1.538	EXRATE(-1)
0.154	1.530	1.248	1.911	EXRATE(-2)
0.001	-4.060	0.150	-0.610	GDPG
0.006	-3.377	0.171	-0.580	GDPG(-1)
0.245	-1.226	0.134	-0.164	GDPG(-2)
0.762	0.309	0.043	0.013	BRDM_GDP
0.112	1.723	0.056	0.097	BRDM_GDP(-1)
0.009	-3.156	0.070	-0.223	BRDM_GDP(-2)
0.003	3.772	0.185	0.699	DEINTERST
0.126	-1.655	0.261	-0.433	DEINTERST(-1)
0.001	-4.045	0.188	-0.762	DEINTERST(-2)
0.250	1.214	0.193	0.235	DEINTERST(-3)
0.062	2.074	7.797	16.172	C

1.955964	Mean dependent var	0.910753	R-squared
1.081183	S.D. dependent var	0.780940	Adjusted R-squared
1.755556	Akaike info criterion	0.506035	S.E. of regression
2.564394	Schwarz criterion	2.816788	Sum squared resid
2.002826	Hannan-Quinn criter.	-7.577778	Log likelihood
1.651442	Durbin-Watson stat	7.015867	F-statistic
		0.001155	Prob(F-statistic)

*Note: p-values and any subsequent tests do not account for model selection.

Table 3: of ARDL test result for Turkey

Dependent Variable: INF
Method: ARDL
Date: 10/11/22 Time: 20:25
Sample (adjusted): 1993 2020
Included observations: 28 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): EXRATE GDPG BRODM_GD DEPINTRST
Fixed regressors: C
Number of models evalulated: 768
Selected Model: ARDL(2, 2, 3, 3, 3)

Prob.*	t-Statistic	Std. Error	Coefficient	Variable
0.605	-0.533	0.295	-0.157	INF(-1)
0.394	-0.890	0.283	-0.252	INF(-2)
0.898	-0.130	6.952	-0.906	EXRATE
0.288	-1.121	10.928	-12.259	EXRATE(-1)
0.080	1.941	8.652	16.802	EXRATE(-2)
0.374	0.930	0.466	0.434	GDPG
0.377	-0.923	0.399	-0.368	GDPG(-1)
0.898	-0.131	0.382	-0.050	GDPG(-2)
0.086	-1.897	0.311	-0.591	GDPG(-3)
0.324	-1.036	0.421	-0.436	BRODM_GD
0.015	2.903	0.448	1.303	BRODM_GD(-1)
0.001	-4.441	0.473	-2.101	BRODM_GD(-2)
0.004	3.658	0.423	1.549	BRODM_GD(-3)
0.000	7.164	0.257	1.844	DEPINTRST
0.989	0.014	0.411	0.005	DEPINTRST(-1)
0.124	1.676	0.356	0.597	DEPINTRST(-2)
0.007	-3.373	0.186	-0.628	DEPINTRST(-3)
0.216	-1.320	24.635	-32.537	C

32.65696	Mean dependent var	0.992414	R-squared
32.68098	S.D. dependent var	0.979519	Adjusted R-squared
6.179316	Akaike info criterion	4.677072	S.E. of regression
7.035734	Schwarz criterion	218.7500	Sum squared resid
6.441132	Hannan-Quinn criter.	-68.51043	Log likelihood
2.453584	Durbin-Watson stat	76.95732	F-statistic
		0.000000	Prob(F-statistic)

*Note: p-values and any subsequent tests do not account for model Selection

Table 4: ARDL Model Results for Brazil

Dependent Variable: INF
Method: ARDL
Date: 11/02/21 Time: 10:50
Sample (adjusted): 1994 2020
Included observations: 27 after adjustments
Maximum dependent lags: 4 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (4 lags, automatic): EXRATE GDPG BRODM_GD DEINTRST
Fixed regressors: C
Number of models evalulated: 2500
Selected Model: ARDL(4, 4, 3, 4, 4)

Prob.*	t-Statistic	Std. Error	Coefficient	Variable
0.191	-1.680	0.335	-0.564	INF(-1)
0.666	0.476	0.367	0.174	INF(-2)
0.225	-1.520	0.363	-0.553	INF(-3)
0.225	1.522	0.306	0.466	INF(-4)
0.518	-0.729	1.128	-0.823	EXRATE
0.604	-0.577	1.542	-0.890	EXRATE(-1)
0.779	0.306	1.414	0.433	EXRATE(-2)
0.470	-0.824	1.809	-1.492	EXRATE(-3)
0.069	2.774	1.481	4.110	EXRATE(-4)
0.255	-1.403	0.334	-0.469	GDPG
0.079	2.611	0.254	0.665	GDPG(-1)
0.146	-1.949	0.311	-0.606	GDPG(-2)
0.292	1.273	0.259	0.330	GDPG(-3)
0.286	-1.294	0.135	-0.175	BRODM_GD
0.101	2.339	0.193	0.452	BRODM_GD(-1)
0.130	-2.067	0.209	-0.432	BRODM_GD(-2)
0.174	1.774	0.239	0.425	BRODM_GD(-3)
0.143	-1.967	0.179	-0.352	BRODM_GD(-4)
0.081	-2.587	0.002	-0.005	DEINTRST
0.112	2.222	0.002	0.005	DEINTRST(-1)
0.240	-1.461	0.002	-0.003	DEINTRST(-2)
0.099	2.363	0.001	0.004	DEINTRST(-3)
0.165	1.825	0.000	0.000	DEINTRST(-4)
0.244	1.445	5.196	7.511	C

4.080963	Mean dependent var	0.974818	R-squared
2.304911	S.D. dependent var	0.781755	Adjusted R-squared
2.566379	Akaike info criterion	1.076779	S.E. of regression
3.718234	Schwarz criterion	3.478359	Sum squared resid
2.908886	Hannan-Quinn criter.	-10.64611	Log likelihood
3.303528	Durbin-Watson stat	5.049219	F-statistic
		0.103363	Prob(F-statistic)

*Note: p-values and any subsequent tests do not account for model selection.

استهداف التضخم من خلال ممرات السياسة النقدية: دراسة التجارب الدولية (مصر ونيوزيلندا وتركيا والبرازيل) خلال الفترة(1990–2020)

د. نشوى محمد عبد ربه د. فاروق فتحي الجزار

ملخص البحث باللغة العربية

استهداف التضخم هو إطار لتحقيق الهدف النهائي للسياسة النقدية، أظهرت العديد من الدول أن آلية استهداف التضخم هي نظام فعال لإدارة السياسة النقدية في سعيها لتحقيق الاستقرار العام للأسعار. تهدف هذه الدراسة إلى التعريف بسياسة استهداف التضخم وتحديد ممرات السياسة النقدية وتقديم المتطلبات اللازمة للتنفيذ الناجح لهذه السياسة، استخدم الباحثون نموذج الانحدار الذاتي الموزع (ARDL) بناءً على بيانات البنك الدولي خلال الفترة من 1990: 2020. وخلص البحث إلى أن سعر الصرف وعرض النقود في مصر هما المساران الأكثر تأثيراً في استهداف التضخم، أما بالنسبة لنيوزيلندا يعد معدل الفائدة وعرض النقود من أكثر الأدوات تأثيراً في استهداف التضخم، وفي تركيا يعتبر سعر الفائدة وسعر الصرف وعرض النقود من أكثر المسارات تأثيراً في استهداف التضخم، وبالنسبة للبرازيل فإن سعر الصرف وسعر الفائدة هما أكثر الأدوات فعالية لاستهداف التضخم. وتوصي هذه الدراسة القائمين على السياسة النقدية في هذه الدول بالتركيز على أهم المتغيرات في التأثير على التضخم والتي تمثل القنوات التي يمكن من خلالها استهداف التضخم.

الكلمات الدالة: السياسة النقدية - الممرات - استهداف التضخم - نموذج ADRL.

Suggested Citation according to APA Style

Abdrabow, N. M., Elgazzar, F. F. (2023). Inflation targeting via monetary policy corridors: a study of international experiences (Egypt ,New Zealand, Turkey and Brazil) during the period (1990- 2020). *Journal of Alexandria University for Administrative Sciences, Faculty of Business, Alexandria University,* 60(5), 1-32.