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CHEDDAD Azzeddine, PhD student (Econ.)
Faculty of Economics
University Centre of Maghnia, Tlemcen, Algeria
Al-Zawiya Road, 13300, Maghnia, Algeria
e-mail: cheddad.izzeddine1991@gmail.com
ORCID: http://orcid.org/0009-0006-4250-6001
MEKIDICHE Mohammed, Dr. Sci. (Econ.), Prof.
Faculty of Economics
University Centre of Maghnia, Tlemcen, Algeria
Al-Zawiya Road, 13300, Maghnia, Algeria
e-mail: mkidiche@yahoo.fr
ORCID: http://orcid.org/0000-0001-5001-9250

INFLATION TARGETING IN ALGERIA: OBSTACLES AND OPPORTUNITIES

This study examines the feasibility of inflation targeting (IT) in Algeria, analyzing monetary policy responses using a Taylor Rule and GMM. Results suggest that the Algerian central bank prioritizes price stability over production stability, favoring gradual interest rate adjustments and responding strongly to inflation deviations. The study emphasizes the need for context-specific assessments of IT's effectiveness in developing economies.

***Keywords**: Inflation Targeting; Monetary policy; Taylor Rule; GMM.*

Inflation targeting has become a global monetary policy paradigm in recent decades. Due to its potential to boost economic growth and stability, several developed and developing nations have chosen this price stability strategy (Mishkin, Schmidt-Hebbel, 2007). Inflation targeting entails the central bank publicly setting an inflation target and using policy instruments, mainly interest rate chan-

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ges, to drive inflation toward the objective (Gertler, Bernanke, 1999). The New Keynesian paradigm states that a credible commitment to low and steady inflation may anchor inflation expectations, improving economic results (Woodford, 2003). Central banks may manage expectations to affect inflation and reduce the inflation-unemployment trade-off.

Inflation targeting works in established economies, but its efficacy in developing areas, notably MENA, is debated (Balima et al., 2017; Mishra, Dubey, 2022). Several studies have shown that inflation targeting in emerging economies can improve inflation management, financial stability, and access to international financial markets (Balima et al., 2017; Mishra, Dubey, 2022). Research shows that inflation targeting can underpin inflation expectations in emerging markets like established countries (Suh, Kim, 2021).

Emerging market inflation targeting has needed to be more consistently implemented. Institutional strength, currency rate dynamics, and dollarization may affect inflation targeting (Ebeke, Fouejieu, 2018a; Hove et al., 2017; Stojanovikj, Petrevski, 2021). Each country's economic and institutional circumstances must be carefully examined to determine the effects and efficacy of an inflation-targeting system.

Algeria is a critical case study for inflation targeting due to its distinct economic characteristics and shifting monetary policy landscape. While little research has focused on Algeria, other emerging countries have found that central bank communication, openness, and institutional credibility are crucial to inflation targeting (Chugunov et al., 2019). This article examines Algeria's inflation-targeting potential. We will use a Taylor Rule framework to evaluate Algerian monetary policy dynamics and the central bank's response to inflation and production swings. This research will add to the evolving debate on inflation targeting in Algeria, taking into account its economic and institutional context. This paper examines the effectiveness of inflation targeting in Algeria by analyzing the country's monetary policy dynamics using a Taylor Rule framework and GMM.

Boucekkine et al. (2021) provide a comprehensive overview of Algeria's monetary policy framework, tracing its evolution, strengths, and weaknesses. Their analysis reveals that Algeria's monetary policy has undergone significant shifts over time, influenced by both domestic and external factors. From the 1970s to the 1980s, Algeria experienced rapid monetary expansion driven by public investment monetization and budget deficits. This period was marked by a decline in the Algerian dinar, rising inflation, and growing financial constraints. In the 1990s, reforms were implemented to stabilize the economy. The government prioritized establishing a two-tier financial structure, strengthening the Bank of Algeria's role, and reducing inflation. Despite initial success, exogenous shocks and persistent budget shortfalls continued to pose challenges. The 2000s saw a surge in oil prices, leading to the accumulation of substantial reserves in the Revenue Regulation Fund. This period witnessed a focus on sterilizing surplus liquidity and curbing inflation. However, with the fall of oil prices in 2014, fiscal dominance returned. The government resorted to using the Bank of Algeria's

monetary funding to cover budget deficits. This raised concerns about inflationary pressures and the sustainability of the existing monetary policy approach. The 2014 oil price drop highlighted the vulnerabilities of Algeria's economy and underscored the need for a comprehensive reassessment of the existing monetary policy strategy. The significant reliance on oil exports, combined with the large informal sector, creates a complex environment for effective policy implementation. To navigate these challenges, policymakers must carefully consider the objectives, tools, and obstacles inherent to Algeria's monetary policy framework.

Allegret and Benkhodja (2015) noted that Algeria's oil exports complicate matters. Oil income fluctuations complicate economic management. Capital inflows at high oil prices might cause inflation, necessitating price stabilization and management. Conversely, falling oil prices can reduce government revenue, slowing economic development and expenditure.

According to (Omolade, Ngalawa, 2016), Algeria's monetary policy toolset concentrates on monetary aggregates. The central bank controls the money supply and interest rates via several mechanisms. Options include open market operations (buying or selling government bonds), bank reserve requirements, and discount rates. Money supply changes affect interest rates, company and consumer borrowing costs, and economic activity. Lower interest rates encourage borrowing and investment, especially in manufacturing, boosting economic development. Higher interest rates reduce borrowing and expenditure, lowering inflation.

Despite available instruments, Algeria's large informal economy and sensitivity to exogenous shocks make monetary management difficult. The informal economy drives money demand, especially for cash transactions, according to (Boucekkine et al., 2021). This industry resists typical monetary policy instruments, making policy evaluation challenging. Algeria is affected by global oil prices as an exporter. Allegret and Benkhodja (2015) emphasize the need to analyze these external shocks' dynamic consequences and the mitigation potential of varying monetary policy rules. Their study implies that a core inflation-targeting regulation might stabilize production and inflation while improving social welfare.

Finally, Algeria's monetary policy framework must adjust to a changing economic landscape driven by domestic and foreign pressures. Stability and sustainable growth need ongoing policy instrument review and effectiveness. Effective policy solutions require a fuller knowledge of the involvement of the informal economy. Algeria can build a stronger, more prosperous future by tackling these issues.

THE MIXED EVIDENCE OF INFLATION TARGETING: LESSONS FROM DEVELOPED AND EMERGING ECONOMIES

While governments often set price stability as a key economic objective, it is primarily central banks that implement inflation targeting policies to achieve this goal. This review examines inflation targeting theory and practice worldwide to educate Algeria's inflation targeting discussion.

In the 1990s, inflation targeting became a popular monetary policy tactic globally. Its fundamental tenet is that the central bank publicly announces an inflation target and uses interest rate changes to attain and maintain price stability (Gertler, Bernanke, 1999). The New Keynesian paradigm underpins inflation targeting by arguing that a credible commitment to low and stable inflation may anchor inflation expectations, improving economic outcomes (Woodford, 2003). This concept argues that central banks may manage expectations to affect inflation and reduce the inflation-unemployment trade-off.

INFLATION TARGETING IN DEVELOPED ECONOMIC

Empirical evidence on the effectiveness of inflation targeting presents a mixed picture. Studies analyzing experiences in developed economies generally find that inflation targeting has been successful in achieving and maintaining low inflation rates (Mishkin, Schmidt-Hebbel, 2007). For instance, countries like Canada and the United Kingdom have witnessed significant reductions in inflation volatility since adopting inflation targeting (Roger, Stone, 2005). However, the success stories are not without caveats. Some research suggests that the benefits of inflation targeting might come at the cost of increased output volatility, particularly during economic downturns (Ball, Sheridan, 2004).

IT research in industrialized countries regularly examines the framework's subtleties and interactions with other policy instruments. Hoffmann et al. (2022) show that people can comprehend average inflation targeting (AIT) and that it stabilizes inflation and reduces the danger of breaking the zero lower bound on interest rates. Budianto et al. (2023) compare AIT to traditional IT and price level targeting. Under certain restricted rationality circumstances, AIT with adequate history dependency may be less effective than conventional IT, but it can be near-optimal.

The interaction between IT and fiscal policy is equally interesting. According to (Apeti et al., 2023a, 2023b), it affects public spending composition and fiscal policy instability. Their analysis implies that IT adoption can reduce current spending compared to public investment and fiscal policy instability, improving budgetary discipline.

B. Herzog (2023) and C. Jia & J. Wu (2023) examine AIT and symmetric inflation targeting issues amid high inflation. They stress the importance of clear communication and quick modifications to preserve pricing stability due to temporal inconsistencies and credibility challenges.

INFLATION TARGETING IN EMERGING ECONOMICS

Some studies report increased inflation management and financial stability (Balima et al., 2017; Mishra, Dubey, 2022) while others report problems and mixed results. In this literature study, IT research in developing countries is examined for its application and influence in Algeria. IT adoption benefits emerging countries, according to several research (Balima et al., 2017). Emerging economies get

access to international financial markets by improving sovereign debt risk with IT adoption. Increased central bank openness and accountability improved banking system resilience and external capital inflows (Mishra, Dubey, 2022). S. Suh and D. Kim (2021) demonstrated that IT anchors inflation expectations in emerging markets like it does in established ones. Despite the good outcomes, numerous studies indicate IT adoption obstacles and inconsistent results in emerging markets!? Even with high institutional quality, many EMEs adopting IT fail inflation objectives (Hove et al., 2017). They disputed that IT decreases EME inflation volatility (Stojanovikj, Petrevski, 2021). IT nations have different exchange rate flexibilities, showing that trade openness and external debt affect the link between IT and exchange rate regimes (Ebeke, Fouejieu, 2018b).

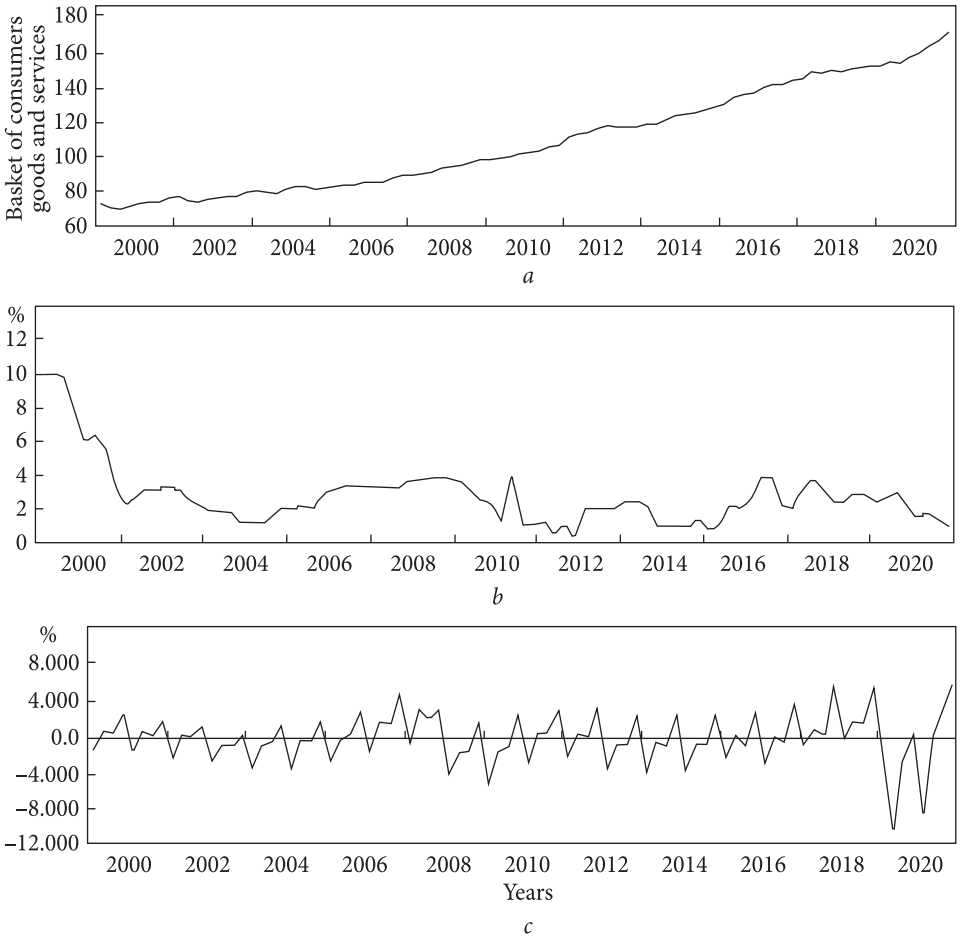
Recent studies add elements and theoretical frameworks to the topic (Cabral et al., 2020). The currency rate affects EME central banks' response function! Particularly non-targeters. (Chugunov et al., 2019). Successful IT adoption in emerging economies requires central bank independence and responsibility, she said. Additionally, D. Šoškić (2015) emphasised the issues of excessive dollarization for IT effectiveness in Serbia.

Are you advocating Taylor Rule changes for such economies? The studies above give significant insights on IT in emerging markets, but Algeria-specific research is few. However, other studies highlight the central bank's need for communication and openness. The literature on IT in developing economies shows both successes and problems. Studies show IT may help inflation control and financial stability, but its efficacy relies on institutional strength, exchange rate dynamics, and dollarization. Due to Algeria's unique economic and institutional characteristics, further study is needed to determine the consequences and efficacy of an IT system.

Inflation targeting stabilises prices and anchors inflation expectations (Mishkin, Schmidt-Hebbel, 2007), but a balanced view must weigh its drawbacks, especially in emerging countries. Hove et al. (2017) argue that insufficient institutional capacity, currency rate volatility, and financial sector growth might hinder inflation targeting in emerging nations. These studies imply that emerging economies need strong institutional frameworks, financial systems, and communication methods to fully benefit from inflation targeting.

THE TAYLOR RULE FRAMEWORK: A TOOL FOR ANALYZING MONETARY POLICY DYNAMICS

This study analyzes major macroeconomic factors from Q1 2000 to Q4 2021 using the Generalized Method of Moments (GMM). The analysis uses CPI to assess inflation, MMR to measure interest rates, and NGDP to calculate nominal GDP. M. Ravn and H. Uhlig (2002) indicated, the study uses the Hodrick-Prescott (HP) filter to examine the output gap generated from NGDP to account for cyclical variations and potential output. The variables are fully described in Table 1.



Evolution of Key Macroeconomic Variables in Algeria (2000 Q1 — 2021 Q4): *a* — CPI; *b* — MMR; *c* — Output gap

Source: authors' calculations using data from: The International Monetary Fund (IMF). International Financial Statistics Database. URL: https://www.imf.org/en/Data (accessed on: 12.01.2024).

Table 1. **List of Variables and Data Source**

Symbol	Variables	Data source (IMF/WB)
MMR	The money market rate	This rate includes the rediscount rate, interbank borrowing interest rate
CPI	General Consumer Price Index	The rate is expressed as an annual percentage change with a base year of 2010
NGDP	Nominal GDP	The GDP gap or output gap is further analyzed using the Hodrick-Prescott filter

Source: authors' description.

MMR changes across 20 periods are seen in the graph. The fast decrease and prolonged volatility reflect money market instability caused by economic shocks or governmental actions. Changes in central bank policy, liquidity circumstances, and economic activity may cause variations and cyclical patterns. This decreasing trend in the MMR, particularly evident during the last few years of our data period (2018-2021), may suggest a shift towards a more accommodative monetary policy stance or improvements in liquidity conditions. To determine the causes of these MMR oscillations and their effects on the economy, more econometric study using relevant economic data and time series models is needed. The initial increase indicates significant inflationary trends in the context of the Consumer Price Index (CPI). Currency influx and salary increases without manufacturing capacity increases are to blame for this situation. This time, there were large output gap changes due to increased oil prices and economic and political turmoil / show (Fig.).

Numerous studies have examined J. Taylor (1993) mathematical method, which allowed the US Federal Reserve to modify interest rates depending on inflation and economic activity in other nations and periods.

Taylor Rule has been modified to account for financial stability and the zero lower bound on interest rates (Ajello et al., 2016; Reifschneider, Williams, 2000). Recently, F. Bianchi et al. (2021) and T. Davig et al. (2011) examined Taylor Rule under unconventional monetary policy situations and their effects on fiscal policy. These ongoing studies demonstrate the Taylor Rule continuous relevance as a framework for understanding and analyzing monetary policy while also emphasizing the need for modification and improvement in light of current economic issues.

$$i_t = r^* + \beta(\pi_t - \pi^*) + y(y_t - y_t^*), \quad (1)$$

where i_t — the Federal Reserve rate is called the Taylor rate; r^* — real interest rate; π_t — the inflation rate; π^* — the target inflation rate; y — Real domestic product; y_t — Nominal domestic product; y_t^* — estimated domestic product; β — parameters.

This section introduces the basic linear Taylor Rule proposed by T. Qin and W. Enders (2008):

$$i_t = w + \beta_\pi \pi_t + \beta_y y_t, \quad (2)$$

$$w = r^* - \theta\pi^*, \quad \beta_\pi = 1 + \theta. \quad (3)$$

In the equation, i_t represents the long-run equilibrium real interest rate, π^* represents the goal inflation rate, π_t represents the inflation rate, and y_t represents the output gap.

Equation 2 can be extended by adding the lagged interest rate to account for monetary policy inertia (Clarida et al., 2000; Clarida et al., 1998) and exchange rate (Ball, 1999, 2000; Svensson, 2000; Taylor, 2002). This may be appropriate for open economies like Algeria, which are vulnerable to external shocks.

Thus, the increased Taylor Rule is:

$$i_t = w + \lambda i_{t-1} + \beta_\pi \pi_t + \beta_y y_t, \quad (4)$$

where i_{t-1} is interest rate smoothing, i_t is the nominal short-term interest rate, β_π creates inflation rate coefficient estimate (π_t), output gap coefficient (y_t), and interest rate smoothing degree (λ denotes the degree of interest rate smoothing = i_{t-1}).

We use GMM to estimate the equations in first differences and levels of the variables concurrently, employing lags in levels and lagged differences as "internal" instruments for the differenced and level equations. Compared to the different GMM estimators, system GMM has more instruments and moment conditions, increasing efficiency. This estimator is recommended when certain variables, including the dependent variable, have near-unit root processes.

EXPLORING THE LIMITS OF INFLATION TARGETING: CHALLENGES AND CONSIDERATIONS FOR ALGERIA

Descriptive statistics. The data show the MMR, CPI, and production gap. As for central tendency, the average MMR is 2.74, the CPI is 108.99, and the output gap is almost nil at 4.36. This implies a stable economy with low inflation and near-potential output.

However, dispersion data show otherwise. The MMR, CPI, and production gap standard deviations are 1.88, 29.81, and 2764.62. In the output gap, this shows high volatility. The output gap's significant coefficient of variation (CV) supports this finding, suggesting its values are widely distributed around the mean. Though less variable, the MMR and CPI also vary.

Table 2. **Descriptive statistics**

Variables	MMR	CPI	Output gap
Mean	2,743141	108,9969	4,36E-09
Median	2,38613	101,8572	101,0885
Maximum	9,99346	172,2675	6102,005
Minimum	0,3125	69,53683	–10286,75
Std, Dev,	1,882781	29,80809	2764,619
Skewness	2,215867	0,414861	–0,597295
Kurtosis	8,905517	1,845483	4,872231
Jarque-Bera	199,8898	7,411613	18,08508
Probability	0	0,02458	0,000118
CV	68,6359542	27,3476493	6,34E+13
Sum	241,3964	9591,73	3,84E–07
Sum Sq, Dev,	308,4033	77301,45	6,65E+08
Observations	88	88	88

Source: computed by the authors via EViews13 software.

MMR ranges from 0.31 to 9.99, CPI from 69.54 to 172.27, and output gap from –10286.75 to 6102.01. These extremes, especially for the production gap, reflect economic shocks or considerable activity variations (Table 2).

Table 2 shows that the output gap exhibits significant volatility, a pattern likely influenced by the volatility in oil prices, which significantly impact Algeria's economy. The large informal sector also contributes to these fluctuations, making it difficult to fully capture economic activity

The money market rate (MMR) and consumer price index (CPI) have a negative correlation (–0.386), indicating CPI falls as MMR rises. Higher interest rates discourage borrowing and spending, an expected economic pattern lowering prices. However, MMR and production Gap have a positive connection (0.045), implying that as MMR grows, so does the production gap. Higher interest rates may reduce economic activity and production, expanding the GDP gap. However, the CPI-production Gap association is modest (0.012), suggesting that other factors may influence the production gap more. The negative association between the MMR and CPI (–0.386) shows that higher money market rates reduce inflation. This fits traditional monetary policy. The weak association between the CPI and the output gap (0.012) implies that Algeria's production gap is influenced by factors other than inflation. Oil reliance, structural problems, and the scale of the informal sector make governing the Algerian economy difficult (Table 3).

The variance inflation factor (VIF) test results to assess multicollinearity in our data (Table 4). This VIF test can be viewed as follows: A value of one implies no correlation, whereas a number between 1 and 5 indicates considerable correlation.

A correlation coefficient above 5 indicates a substantial correlation. Increasing the VIF affects the dependability of estimate findings (Djedaiet et al., 2024). The results suggest that all variables have a VIF less than 5.

Table 3. **Correlation matrix**

Variables	MMR	CPI	Output gap
MMR	1		
CPI	–0.3863954955349273	1	
Output gap	0.04545093971998572	0.01209627241046616	1

Source: computed by the authors via STATA17 software.

Table 4. **VIF test findings**

Variables	VIF	1/VIF
CPI	1.004	0.996
Output gap	1.003	0.997

Source: computed by the authors via STATA17 software.

Table 5. **Linear unit roots tests**

Unit root tests		ADF Test		PP Test		KPSS Test	
Variables	*t*-Sta / Prob	Intercept	Intercept and Trend	Intercept	Intercept and Trend	Intercept	Intercept and Trend
MMR	*t*-Statistic	–4.0754	–3.8464	–4.1858	–3.8612	0.4671	0.1396
	prob	0.0017***	0.0186**	0.0012***	0.0179**	0.0144**	0.0410*
CPI	*t*-Statistic	3.7299	–1.1532	3.7299	–1.1532	1.1878	0.2962
	prob	1.0000	0.132	1.0000	0.9132	0.0000***	0.0000***
Output gap	*t*-Statistic	–3.3802	–3.3859	–9.3925	–9.3365	0.0330	0.0330
	prob	0.0146**	0.0606*	0.0000***	0.0000***	1.0000	1.0000

N o t e s: The lag length for the ADF test is chosen based on the AIC criterion. The PP and KPSS tests are estimated on the basis of the Bartlett-kernel, using the Newey-West bandwidth (Newey, West, 1994). The null hypothesis of the ADF and PP tests is that the series is nonstationary, while the null hypothesis is stationarity against the alternative of a unit root for the KPSS test. *, ** and *** indicate statistical significance at the 1, 5 and 10% levels, respectively.
Source: computed by the authors via EViews13 software.

Unit root tests. To study the random properties of the data, many standard approaches were utilized to find unit roots. We used ADF test (Dickey, Fuller, 1981), PP test (Phillips, Perron, 1988), and KPSS test (Kwiatkowski et al., 1992). All variables are I(0) and input into the threshold Taylor Rule model in levels. The results of these tests are in Table 5.

GMM model estimation. Table 6 presents the results of the GMM estimation of the Taylor Rule model. The model exhibits a strong fit with an *R*-squared of 0.873, indicating that approximately 87.3% of the variation in the money market rate is explained by the inflation gap, output gap, and lagged interest rate. This suggests a robust statistical relationship between the model variables and the central bank's interest rate decisions. Our instruments were validated using Sargan test (1958), confirming their exogeneity. Furthermore, the model residuals show no signs of autocorrelation or heteroscedasticity.

The study implies Algeria's monetary policy uses Taylor's rules. The lagged interest rate coefficient (λ) is positive and highly significant, indicating central bank interest rate smoothing. Stability and predictability are achieved by gradually adjusting the policy rate based on prior levels.

Furthermore, the considerable and negative inflation gap

coefficient (β_π) shows a definite response to inflation departures from the goal. The central bank raises interest rates to reduce inflation and stabilize prices when inflation climbs over target.

However, the output gap coefficient (β_y) is statistically negligible, suggesting a less decisive output stabilization strategy. In the model, the central bank's response to output deviations from potential is either nonexistent or statistically insignificant. This may reflect a decreased emphasis on short-term output volatility or the existence of fiscal policy or structural economic issues impacting policy response.

Finally, incorporating external factors like global economic trends, commodity price changes, and exchange rate dynamics might expand the research and give a more holistic picture of Algeria's monetary policy in the larger economic environment. This would help evaluate the central bank's policy aims and macroeconomic stability.

Discussion. Examining Algeria's monetary policy using the Taylor Rule model yields fascinating results. A significant and positive coefficient of lagged interest rate (λ) indicates a strong focus on interest rate smoothing. This suggests that the Bank of Algeria prefers gradually modifying interest rates based on past levels rather than reacting to short-term swings. This strategy follows inflation targeting, which requires anchoring inflation expectations for long-term price stability (Mishkin, Schmidt-Hebbel, 2007).

Departures from the inflation objective are reflected in the considerable and negative coefficient of the inflation gap (β_π). To stabilize prices, the central bank aggressively boosts interest rates when inflation exceeds the target. This is similar to other emerging economies that have embraced inflation targeting, where central banks prioritize price stability (Balima et al., 2017).

However, the negligible output gap coefficient (β_y) indicates less emphasis on output stabilization. This suggests various options. First, noting the inflation-output volatility trade-offs, the Bank of Algeria may emphasize long-term price stability above short-term output swings (Ball, Sheridan, 2004). Second, Algeria's oil dependency and labour market rigidities may hinder the monetary policy's ability to manage production gaps. These variables may require fiscal and structural adjustments in addition to monetary policy to stabilize the economy.

Table 6. **Taylor Rule based on GMM**

Parameters	Coefficient	*t*-Statistic	Std. Error	.Prob
w	1.18	1.063	1.110	0.029
λ	0.817 *	13.035	0.059	0.000
β_π	–0.158 ***	0.053	2.946	0.004
β_y	3.550	2.001	–0.177	0.859
	R-squared = 0.873		Sargan test = 52.38 (0.181)	

N o t e: * and *** indicate statistical significance at the 1% and 10% levels, respectively.
Source: computed by the authors via STATA17 software.

Our findings are consistent with the literature on inflation targeting in developing economies, highlighting its pros and cons. Inflation targeting improves price stability and financial market development (Mishra, Dubey, 2022), but solid institutional frameworks, exchange rate flexibility, and effective communication strategies are needed for success (Hove et al., 2017; Stojanovikj, Petrevski, 2021).

Limitations and Research Directions. This study contains flaws. Our Taylor Rule model simplifies monetary policy's complicated dynamics. Second, our research covers a particular era and may only partially describe Algeria's monetary policy evolution. Future studies should examine how global economic conditions and commodity price volatility affect Algeria's monetary policy. Furthermore, studying the monetary and fiscal policy relationship may help explain Algeria's macroeconomic stabilization efforts. GMM estimate results in Table 5 show a strong Taylor Rule model fit with an *R*-squared value of 0.873. This means the inflation gap, production gap, and delayed interest rate explain 87.3% of money market rate variance. This shows a strong statistical link between model variables and central bank interest rate choices.

CONCLUSION

This paper examines Algeria's complex monetary policy dynamics using a Taylor Rule framework. Our findings show that the Bank of Algeria prioritizes interest rate smoothing above fast responses to short-term changes. Inflation targeting anchors inflation expectations and promotes long-term price stability (Mishkin, Schmidt-Hebbel, 2007). Similar to other emerging countries that target inflation, the central bank's response to inflation goal deviations strengthens its commitment to price stability.

GMM assessment of Algeria's monetary policy dynamics using the Taylor Rule framework shows a strong model fit with an *R*-squared value of 0.873. This conclusion and the Bank of Algeria's response highlight the necessity of interest rate smoothing, proactive inflation response, and complementing fiscal and structural measures for macroeconomic stabilization.

The negligible reaction to output gaps suggests a trade-off between inflation management and production stability. Several interpretations are possible. First, the Bank of Algeria may weigh long-term price stability against short-term production volatility, admitting the trade-offs. Second, Algeria's oil reliance and labour market rigidities may make monetary policy ineffective in managing production gaps. Fiscal and structural adjustments may be needed to stabilize the economy, along with monetary policy. Our findings suggest that while the Bank of Algeria demonstrates a commitment to price stability through interest rate smoothing and a strong response to inflation deviations, the effectiveness of inflation targeting in stabilizing output remains questionable due to structural factors and policy challenges.

Although our findings are insightful, we must accept the study's limitations. The Taylor Rule model simplifies monetary policy dynamics, yet it is instructive.

The study's period may not reflect Algeria's changing monetary policies. Future studies should examine how global economic patterns, commodity price volatility, and exchange rate dynamics affect Algeria's monetary policy. Exploring the relationship between monetary and fiscal policy may help explain the country's macroeconomic stabilization strategy. Our findings suggest that while the Bank of Algeria seeks price stability through interest rate smoothing and a strong response to inflation deviations, inflation targeting may not stabilize output due to oil dependence, the informal sector, or limited policy instruments. Strengthening institutions, diversifying the economy, and coordinating fiscal and monetary policy can help Algeria target inflation.

In conclusion, this study emphasizes the relevance of economic background and institutional framework for assessing inflation targeting success. Algeria's experience with the Taylor Rule demonstrates a commitment to price stability. However, achieving output stabilization remains challenging due to oil dependence. Research and policy changes are needed to ensure sustainable and inclusive economic growth as the country integrates into the global economy.

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Азеддін Чеддад, аспірант (економіка), факультет економіки
Університетський центр Магнії, Тлемсен, Алжир
шосе аль-Завія, 13300, Магнія, Алжир
Мохаммед Мекідіче, д-р екон. наук, проф., факультет економіки
Університетський центр Магнії, Тлемсен, Алжир
шосе аль-Завія, 13300, Магнія, Алжир

ІНФЛЯЦІЙНЕ ТАРГЕТУВАННЯ В АЛЖИРІ: ПЕРЕШКОДИ І МОЖЛИВОСТІ

Проаналізовано доцільність інфляційного таргетування (ІТ) в Алжирі з використанням даних з І кварталу 2000 р. по IV квартал 2021 р. ІТ широко використовують, хоча його ефективність у регіонах, що розвиваються, зокрема на Близькому Сході й у Північній Африці, є спірною. Динаміку монетарної політики Алжиру і реакцію центрального банку на інфляцію та зміни виробництва досліджено за допомогою правила Тейлора і узагальненого методу моментів. Встановлено, що Банк Алжиру віддає перевагу згладжуванню відсоткових ставок перед короткостроковою економічною нестабільністю. Агресивна реакція центрального банку на відхилення цільових показників інфляції відповідає його очікуванням стабільності цін в умовах ІТ. Засвідчено меншу увагу до стабільності виробництва, можливо, через залежність економіки від нафти і негнучкість ринку праці. Показано, що монетарна політика Алжиру має елементи ІТ, проте її ефективність залежить від економічної ситуації та інституційної архітектури. Щоб глибше зрозуміти зусилля Алжиру з макроекономічної стабілізації, у майбутньому слід проаналізувати глобальну економічну ситуацію, волатильність цін на сировину, монетарну і фіскальну політику. Доповнено дискусію щодо корисності ІТ для економік, що розвиваються, підкреслено необхідність розгляду економічних умов та інституційних структур. Інфляційне таргетування може допомогти стабілізувати ціни в Алжирі, однак реалізувати цю модель монетарної політики в унікальних економічних умовах важко.

***Ключові слова**: інфляційне таргетування; монетарна політика; правило Тейлора; узагальнений метод моментів.*

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