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The effect of monetary policy on the private sector investment in Morocco: VECM approach

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Abstract: This paper investigates the impact of monetary policy on private investment in Morocco from 2000 to 2023, focusing on both short- and long-term effects of key variables such as interest rates, money supply, and exchange rates. Using a Vector Error Correction Model (VECM), the analysis reveals that, in the short term, economic growth is the primary driver of private investment, while liquidity plays a supportive role. In the long term, GDP growth, foreign direct investment (FDI), and macroeconomic stability are crucial stimulators, whereas tax burden and interest rates hinder investment. Surprisingly, money supply negatively impacts investment, suggesting inefficiencies in resource allocation. The findings highlight the importance of stabilizing exchange rates, maintaining moderate inflation, and reducing tax burdens to foster a favorable investment climate. Policymakers are encouraged to adopt fiscal reforms, optimize monetary tools, and improve financial market efficiency to channel resources into productive investments and drive sustainable economic growth.
Keywords: *Economic growth, Morocco, Monetary policy, Private investment, VECM.*

1. Introduction

Monetary policy plays a crucial role in shaping the financial conditions of the economy[1], [2], [3], [4], acting as a key determinant of private investment through instruments such as interest rates, money supply and exchange rates. Investment, as a vital component of aggregate demand, is a fundamental driver of economic growth[5], [6], [7], [8], [8], [9], enabling increased production capacity, job creation, and technological progress. It serves as both a response to future needs and a means to achieve financial and macroeconomic objectives, such as economic stability and prosperity.

Private investment, in particular, plays a crucial role in enhancing economic dynamism by channeling funds into productive activities, stimulating innovation, and strengthening economic resilience. Unlike public investment, which is often driven by government policies, private investment is influenced by macroeconomic variables, particularly monetary policy tools. These tools impact borrowing costs, credit availability, and exchange rate stability, which are essential factors shaping investment decisions[10], [10], [11].

In the Moroccan context, private investment is an essential lever for achieving sustainable growth and addressing socio-economic challenges. As a developing country, Morocco faces specific economic pressures, such as inflation, external shocks, and structural vulnerabilities within its financial system. In response to these challenges, monetary authorities implement various monetary policy measures to stabilize the macroeconomic environment and encourage investment. However, the effectiveness of

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these measures, particularly in their influence on private investment, remains a critical area of analysis[12], [13], [14], [15].

This study examines the impact of monetary policy instruments on private investment in Morocco, focusing on key variables such as interest rates, money supply, and exchange rates. It also explores how these factors interact with the broader economic environment, influencing investment decisions in a context characterized by rising inflation and external economic challenges. By analyzing the transmission mechanisms of monetary policy, this research aims to provide concrete recommendations for policymakers and contribute to the ongoing debate on the role of monetary tools in promoting sustainable economic growth. Despite efforts by the Central Bank of Morocco (Bank Al-Maghrib) to stabilize the economy and encourage private sector investment, Morocco continues to face challenges such as inflation, exchange rate fluctuations, and global economic uncertainties. This raises the central question: To what extent do the monetary policy instruments of Bank Al-Maghrib such as interest rates, money supply, and exchange rate management effectively stimulate private investment in Morocco, and how can these policies be optimized to foster a more conducive investment environment?

To answer this question and address its various aspects, the study is structured as follows: Section two provides a comprehensive review of the theoretical and empirical literature on the relationship between monetary policy and private investment. Section three offers an overview of the Moroccan macroeconomic context, with a focus on the role of monetary policy in shaping investment dynamics. Section four details the methodology, including data description and the econometric approach employed in the analysis. Section five presents the empirical findings, discussing both short-term and long-term effects of monetary policy instruments on private investment. Finally, Section six concludes the study by summarizing key insights and offering policy recommendations to enhance the effectiveness of monetary policy in fostering private investment and economic growth in Morocco.

1.1. Research Objectives

The objectives of this research are outlined as follows:

1. Assess the impact of monetary policy instruments on private investment in Morocco: Examine how interest rates, money supply, exchange rates reflecting the policy of the Central Bank of Morocco (Bank Al-Maghrib) and other control variables influence private sector investment decisions. Identify the factors that have an immediate impact on private investment versus those that require structural adjustments to produce long-term effects.
2. Propose actionable policy recommendations: Suggest strategies to enhance monetary policy effectiveness, including exchange rate stabilization, inflation control, and tax reductions.
3. Contribute to the empirical literature: Provide insights into how monetary policy operates in the Moroccan context, expanding the understanding of its transmission mechanisms in developing economies.

2. Literature Review

2.1. Theoretical Background

The relationship between monetary policy and private investment is shaped by various theoretical perspectives and empirical findings, with key mechanisms such as interest rates, money supply, and government borrowing playing central roles. Monetary policy influences the cost of capital and credit availability, which in turn impact private investment decisions.

The IS-LM model highlights how monetary policy shifts equilibrium in goods and money markets, with expansionary policies reducing borrowing costs and stimulating investment, while contractionary policies increase interest rates and discourage borrowing. Similarly, monetarist theory emphasizes the critical role of money supply in stabilizing aggregate demand and fostering investment, while cautioning against excessive government intervention, which can destabilize markets and crowd out private investment.

Classical theory focuses on the adverse effects of government borrowing on private sector investment. Increased public borrowing raises interest rates, limiting access to credit and displacing private investment a phenomenon known as the crowding-out effect. In contrast, Keynesian theory underscores the positive impact of government spending on aggregate demand and investor confidence, particularly in times of economic slack, where government intervention can stimulate private investment through the multiplier effect.

Empirical studies confirm that monetary policy can have both stimulative and restrictive effects, depending on economic structures and implementation contexts. However, challenges such as underdeveloped financial markets, macroeconomic instability, and lagged policy effects limit its effectiveness in some contexts.

In summary, while monetary policy remains a key driver of private investment, its impact varies across theories and economic environments.

2.2. Empirical Evidence

The existing literature on the impact of monetary policy on private investment reveals diverse findings shaped by economic contexts, transmission channels, and analytical methods. While some studies emphasize specific mechanisms linking monetary policy to investment, others focus on national or regional contexts to explore its broader effects. This review organizes the contributions thematically, highlighting their findings, methodologies, and implications.

To begin with, several studies investigate the transmission channels through which monetary policy affects private investment. [16], analyzing the Japanese economy after the collapse of asset price bubbles, demonstrated that monetary policy primarily operates through the interest rate channel. However, the credit channel was found to be largely ineffective, owing to weakened corporate balance sheets. This limitation disproportionately affected non-bond-issuing firms, which rely more heavily on bank credit compared to bond-issuing counterparts. Similarly, [17] examined the behavior of Chinese listed firms during the period 2005–2012, focusing on the role of monetary policy in shaping corporate investment adjustments. Their findings revealed that money supply and credit are critical channels through which monetary policy operates. Moreover, firms were found to accelerate investment adjustments during periods of monetary tightening, with these adjustments becoming more pronounced when money supply and credit expand.

The heterogeneity of firms' responses to monetary policy is further highlighted in [18], which focused on the Malaysian context. This study noted that smaller institutions facing financial constraints are significantly more sensitive to monetary tightening compared to larger institutions with greater financial flexibility. Similarly, in Vietnam, [19] demonstrated that private investment responds positively to money supply, domestic credit, and interest rates, while the exchange rate exhibited no significant influence. Together, these findings emphasize the importance of understanding financial structures and institutional contexts when assessing the effectiveness of monetary policy.

Turning to regional perspectives, studies on sub-Saharan Africa underscore the unique challenges faced by developing economies. [20] provided a comprehensive analysis of 37 sub-Saharan African countries from 1980 to 2012. The findings revealed that monetary policy negatively affects private investment both indirectly, through the bank lending (quantity) channel, and directly, through the interest rate (cost of capital) channel. These dual effects reflect the structural limitations of financial systems in the region, including underdeveloped credit markets and high borrowing costs.

In the case of Nigeria, several studies explore the nuances of monetary policy impacts. (Bayelsa State & Ebisine, 2021) examined the period 1981–2018, revealing a long-term relationship between monetary policy variables and private investment. However, money supply and interest rates were found to exert negative but statistically insignificant effects, while government domestic debt had a positive, albeit also insignificant, impact. Similarly, [22] analyzed monetary policy transmission mechanisms in Nigeria between 1981 and 2015. The study identified a positive relationship between credit to the private sector and real domestic investment, while exchange rates and lending rates negatively affected investment. These findings underscore the complex interplay of monetary policy instruments within the Nigerian economy, where structural inefficiencies often mediate the outcomes.

Moving to Sierra Leone, [23]employed an Error Correction Model (ECM) to assess the impact of changes in monetary policy on private investment behavior from 1980 to 2014. Their results indicated that money supply and gross domestic savings positively influence private investment, whereas inflation, public debt, and Treasury bill rates negatively impact investment levels. Similarly, [24] reinforced these findings, emphasizing the importance of stabilizing macroeconomic variables to enhance the effectiveness of monetary policy in fostering private investment.

Broader studies explore the macro-level impacts of monetary policy on economic growth and investment. For example, [25] analyzed the South African economy, concluding that neither money supply nor policy rates significantly stimulate economic growth. These findings suggest that traditional monetary policy tools may not always effectively drive macroeconomic outcomes, especially in contexts where transmission mechanisms are weak. Similarly, [26], focusing on Nigeria, used a Structural Vector Auto-Regression (SVAR) framework to examine the relationship between monetary policy and economic parameters. The study demonstrated that the effects of monetary policy on real and nominal parameters vary depending on the chosen instruments, such as broad money, rediscount rates, or exchange rates.

Complementing these macroeconomic perspectives, other studies delve into the interaction between monetary policy and financial institutions. (Dickey & Fuller, 1979; Fuller, 1976) Obioma, J., & Onyebueke, C. (2018) examined how monetary policy influences bank credit in Nigeria from 1981 to 2013. Their findings revealed that money supply has an immediate impact on both monetary policy rates and bank credit, underscoring the pivotal role of financial intermediaries in transmitting monetary policy effects to the real economy. Similarly, [27] highlighted the importance of maintaining stable monetary policies to support private capital formation. The study recommended keeping the current policy rate stable while implementing measures to reduce inflation and stabilize exchange rates to enhance private investment.

Finally, in the case of Morocco, [12] examined the relationship between monetary policy and private investment over the period 1995–2020 using a Vector Error Correction Model (VECM). The study revealed that, in the long run, the policy rate and money supply have a negative and significant impact on private investment, whereas the exchange rate and credit to the private sector exhibit a positive and significant influence. This analysis underscores the distinct dynamics of Moroccan private investment in response to monetary policy, highlighting the importance of considering local economic and institutional characteristics.

Expanding this analysis, [28] analyzed the impact of the real effective exchange rate and inflation on international tourism flows to Morocco over the period 1995–2023. Using the Vector Autoregressive (VAR) model and the Granger causality test, this study also incorporated control variables such as gross domestic product per capita and carbon dioxide emissions. The findings highlighted a negative relationship between the real effective exchange rate, inflation, carbon dioxide emissions, and tourism flows, while gross domestic product per capita positively affected tourism demand.

Together, these studies reveal the interconnectedness of monetary policy, exchange rates, and sectoral outcomes in Morocco. While the first study highlights the impact of monetary policy on private investment, the second broadens the scope by demonstrating that exchange rates and inflation also influence the tourism sector. This opens the perspective that exchange rate dynamics and inflationary pressures can have significant implications beyond investment and tourism, potentially affecting other key sectors of the Moroccan economy.

3. Methodology

The econometric approach corresponds to the representation of the behavior of observed phenomena by equations and the estimation of the coefficients of these equations using the history of this phenomenon in order to understand, explain, reproduce and forecast it.

The literature review we presented earlier provided us with a general overview of the variables and methodology used to examine relationship between monetary policy and private investment.

3.1. Description of Data

In this work, we will use eight variables to analyze the impact of monetary policy on private investment:

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Table 1.
Presentation of the variables used.

Variable	Abbreviation	Definition	Source
Private investment	PI	Expenditures by businesses and individuals to acquire goods and services intended for generating future income, including spending on equipment and infrastructure.	High commission for planning (HCP)
Real effective exchange rate	REER	A measure of the relative purchasing power of a domestic currency against a basket of foreign currencies, adjusted for price level differences.	Bank Al-Maghrib (Central Bank of Morocco)
Inflation	INFL	The rate at which the general level of prices for goods and services rises in an economy over a period, affecting purchasing power.	High Commission for Planning (HCP)
Foreign direct investment inflows	FDI	Net investments made by foreign entities in an economy, often for establishing or acquiring businesses, assets, or infrastructure.	Moroccan exchange office
Gross domestic product	GDP	The total value of all goods and services produced in an economy over a given period, used as a key measure of economic activity and health.	High Commission for Planning (HCP)
Tax burden	TB	The total weight of taxes on individuals and businesses in an economy, expressed as a percentage, reflecting the share of income captured by the government.	Ministry of economy and finance of Morocco
Interest rate	IR	The cost of borrowing, expressed as an annual percentage, representing the return expected by investors or lenders on loaned capital.	Bank Al-Maghrib (Central Bank of Morocco)
Money supply	M3	The total amount of money available in an economy, including cash, bank deposits, and liquid financial instruments, often used to gauge liquidity and monetary policy.	Bank Al-Maghrib (Central Bank of Morocco)

All data collected are annual time series from 2000 to 2023, i.e. a total of 24 observations.

3.2. Model Specification

The econometric analysis of our time series requires the application of a vector error correction model (VECM) due to the existence of long-term relationships between the variables. The model used to estimate the effects of monetary policy on private investment is therefore as follows:

$$\Delta y_t = c + \sum_{i=1}^{p-1} \Gamma_i \ \Delta y_{t-i} + \prod y_{t-p} + \varepsilon_t$$

Where Γ the matrix contains coefficients concerning short-term relationships, and $\Pi = \alpha\,\beta'$;

α is a matrix containing the adjustment speeds for each of the cointegrating vectors and β' a matrix comprising the r cointegrating relationships.

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Then the equation for estimating private investment as a function of the other variables is written as follows:

$$\mathrm{PI}_t = c + \sum_{i=1}^{p-1} \beta_i \ \mathrm{REER}_{t-i} + \sum_{i=1}^{p-1} \beta_i \ \mathrm{INFL}_{t-i} + \sum_{i=1}^{p-1} \beta_i \ \mathrm{FDI}_{t-i} + \sum_{i=1}^{p-1} \beta_i \ \mathrm{GDP}_{t-i} + \sum_{i=1}^{p-1} \beta_i \ \mathrm{TB}_{t-i} + \sum_{i=1}^{p-1} \beta_i \ \mathrm{IR}_{t-i} + \sum_{i=1}^{p-1} \beta_i \ \mathrm{M3}_{t-i} + \alpha(\beta_i' \, REER - \beta_i' INFL_{t-p} - \beta_i' \, FDI_{t-p} - \beta_i' \, GDP - \beta_i' TB_{t-p} - \beta_i' IR_{t-p} - \beta_i' \, M3_{t-p} - \beta_0') + \varepsilon_t$$

4. Empirical Results

4.1. Descriptive Analysis of Variables

This table presents the various descriptive statistics for each variable: median (median), mean (mean), standard error of the mean (SE.mean), confidence interval of the mean (CI.mean.0.95), variance (var), standard deviation (std.dev), and coefficient of variation (coef.var).

It also presents normal distribution statistics (skewness, skew.2SE, kurtosis, kurt.2SE, normtest.W, normtest.p).

Table 2.
Descriptive statistics for variables.

	PI	REER	INFL	FDI	GDP	TB	IR	M3
Median	30.25	100.57	1.4477	2.495	3.6737	27.4	3.125	105.8109
Mean	30.1417	102.15	1.8912	2.5838	3.6811	27.1875	2.9375	100.7232
SE.mean	0.1717	1.0306	0.3305	0.2714	0.6021	0.241	0.158	3.757
CI.mean	0.3552	2.132	0.6838	0.5615	1.2455	0.4986	0.3269	7.772
Var	0.7078	25.492	2.6222	1.7683	8.6996	1.3942	0.5992	338.7654
std.dev	0.8413	5.049	1.6193	1.3298	2.9495	1.1808	0.7741	18.4056
coef.var	0.0279	0.0494	0.8562	0.5147	0.8012	0.0434	0.2635	0.1827
Skewness	-0.4865	0.7793	1.7229	1.5749	-1.8022	-0.2958	0.359	-0.4959
skew.2SE	-0.5151	0.8251	1.8241	1.6674	-1.9081	-0.3132	0.3801	-0.5251
Kurtosis	-1.0127	-0.3323	2.2299	3.3124	5.216	-1.3746	0.5737	-0.887
kurt.2SE	-0.5517	-0.181	1.2149	1.8046	2.8416	-0.7489	0.3125	-0.4832
normtest.W	0.9379	0.9237	0.7656	0.8437	0.8109	0.9324	0.9101	0.9132
normtest.p	0.1464	0.0707	0.0001	0.0017	0.0004	0.1102	0.0355	0.0414

Source: Compiled by the author on the basis of results obtained from R software.

These statistics show that private investment, the exchange rate and tax burden are normally distributed (normtest.p > 5%), while the other variables are not normally distributed (normtest.p <5%).

4.2. Analysis of Variable Stationarity and Order of Integration

A large number of unit root tests exist. The pioneering works in this field are those of [29], [30]. Dickey-Fuller tests are parametric tests used to demonstrate the stationary or non-stationary nature of a chronicle by determining a deterministic or stochastic trend. These tests are based on the estimation of an autoregressive process.

In our study we will apply the ADF test, which is based on the following assumptions:

$$\begin{cases} H_0: Non-stationarity \\ H_1: stationarity \end{cases}$$

Results of the ADF test (for the results of the KPSS test, see the appendix) on the various series studied are summarized in the following table:

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Table 3.
Variable stationarity.

Type de test	Variables	Observations	Ordre d'intégration
ADF	PI	Non stationnaire	I(1)
	REER	Non stationnaire	I(1)
	INFL	Stationnaire	I(0)
	FDI	Stationnaire	I(0)
	GDP	Non stationnaire	I(1)
	TB	Non stationnaire	I(1)
	IR	Non stationnaire	I(1)
	M3	Non stationnaire	I(1)

Source: Compiled by the author on the basis of results obtained from R software.

All series are non-stationary except inflation and foreign direct investment. Series with an order of integration equal to 1 can have cointegration relationships.

4.3. Cointegration Test

The following table shows the results of Johansen's cointegration test.

Table 4.
Cointegration test.

Number of relationships	Test statistic	Critical values		
		10pct	5pct	1pct
r <= 7	4.85	7.52	9.24	12.97
r <= 6	21.29	17.85	19.96	24.60
r <= 5	45.46	32.00	34.91	41.07
r <= 4	77.67	49.65	53.12	60.16
r <= 3	117.49	71.86	76.07	84.45
r <= 2	722.37	97.18	102.14	111.01
r <= 1	-	126.58	131.70	143.09
r = 0	-	159.48	165.58	177.20

Source: Compiled by the author on the basis of results obtained from R software.

According to the results of the Johansen test, the test statistic for r less than or equal to 7 is below the critical value at 5%, so we cannot reject the null hypothesis that there are at most seven cointegrating relationships.

Consequently, the Johansen test indicates seven cointegrating relationships between the different variables in the model, which will lead us to estimate a vector error-correction model that allows us to estimate long-term relationships.

4.4. Vector Error Correction Model

The optimal delay is determined using the information criteria (Akaike (AIC), Schwars (SC), Hannan-Quinn (HQ), and Final Predictor Error (FPE)), for which we will choose the number MAX(p) = 5.

```
Call:
lm(formula = ip.d ~ ect1 + ip.dl1 + reer.dl1 + infl.dl1 + fdi.dl1 +
    gdp.dl1 + pf.dl1 + ir.dl1 + m.dl1 - 1, data = data.mat)

Residuals:
     Min       1Q   Median       3Q      Max
-0.36998 -0.12810 -0.01487  0.12107  0.21806

Coefficients:
          Estimate Std. Error t value Pr(>|t|)
ect1     -0.743796   0.337614  -2.203   0.0462 *
pi.dl1    0.086144   0.288065   0.299   0.7696
reer.dl1 -0.013197   0.034785  -0.379   0.7105
infl.dl1 -0.046732   0.045010  -1.038   0.3181
fdi.dl1  -0.003658   0.038749  -0.094   0.9262
gdp.dl1   0.065713   0.030359   2.165   0.0496 *
tb.dl1   -1.171165   0.808216  -1.449   0.1710
ir.dl1   -0.111456   0.214818  -0.519   0.6126
m3.dl1    0.047416   0.024741   1.917   0.0775 .
```

Figure 1.
Choosing the optimal number of delays.
Note: ***, ** and * represents stationary at 1%, 5% and 10% level of significance respectively

```
VARselect(cbind(pi,reer,infl,fdi,gdp,tb,ir,m3),type="non" ,lag.max =5)

## $selection
## AIC(n)  HQ(n)  SC(n) FPE(n)
##      3      3      3      3
```

Figure 2.
Estimation of the VECM (1) model.
Source: R software.

Therefore, the equation for estimating private investment according to our VECM model is as follows:

$PI = -0.74\, ect1 + 0.086\, PI_{t-1} - 0.013\, REER_{t-1} - 0.046\, INFL_{t-1} - 0.0036\, FDI_{t-1} + 0.065\, GDP_{t-1} - 1.17\, TB_{t-1} - 0.11\, IR_{t-1} + 0.047\, M3_{t-1}$

With the long-term equation: *ect1* $= PI_{t-2} + 0.083\ REER_{t-2} + 0.14\ INFL_{t-2} + 0.03\ FDI_{t-2} - 0.17\ GDP_{t-2} + 1.07\, TB_{t-2} - 0.2\, IR_{t-2} - 0.1\, M3_{t-2} - 56.86$

The results of the VECM (Vector Error Correction Model) allow us to analyze the impact of monetary policy on private investment in Morocco, distinguishing between short- and long-term dynamics. Firstly, analysis of the model shows that the error correction coefficient (ect1) is significant and negative (-0.743796), indicating a rapid adjustment towards long-term equilibrium in the event of imbalance. Approximately 74.4% of deviations are corrected each period.

```
$beta
                   ect1
pi.l2        1.00000000
reer.l2      0.08314682
infl.l2      0.14529943
fdi.l2       0.03312022
gdp.l2      -0.17212179
tb.l2        1.07059681
ir.l2       -0.20315745
m3.l2       -0.10083671
constant   -56.86786991
```

Figure 3.
Estimation of cointegration relationships.
Source: R software.

In the short term, GDP (gdp.dl1) has a positive and significant effect on private investment, reflecting the importance of economic growth. In addition, money supply (m3.dl1) has a marginally significant effect, suggesting that increased liquidity can stimulate investment. By contrast, other variables such as the real exchange rate, inflation, FDI, the tax burden and interest rates show no significant effects in the short term.

The cointegration relationships highlight the long-term links between private investment and other variables.

$$PI = -0.083\ REER_{t-2} - 0.14\ INFL_{t-2} - 0.03\ FDI_{t-2} + 0.17\ GDP_{t-2} - 1.07\ TB_{t-2} + 0.2\ IR_{t-2} + 0.1\ M3_{t-2} + 56.86$$

The model indicates that the real exchange rate (REER) has a negative impact on private investment, which can be attributed to an increase in import costs in the event of dirham depreciation. Inflation (INFL), on the other hand, has a moderate positive effect, suggesting that controlled inflation could encourage investment via lower real interest rates. FDI and GDP have a significant positive impact, underlining their role in stimulating private investment.

However, tax burden (TB) and interest rates (IR) exert negative effects, dampening investment. Surprisingly, money supply (M3) also has a negative effect, which could be explained by a misallocation of financial resources to non-productive assets.

Table 5.
Validation test results.

Tests	Null hypothesis	P-value	Result
Normality.test	Normality	0.6838	Normality of residuals
Arch.test	homoscedasticity	1	Homoscedasticity of residuals
Serial.test	Non-autocorrelation	0.9934	Non-autocorrelation of residuals

Source: Compiled by the author on the basis of results obtained from R software.

4.5. Model Validation

In order to guarantee the significance and reliability of the model, it is essential to test the validity of statistical hypotheses. To this end, tests are carried out on the model's residuals, notably those concerning autocorrelation, heteroscedasticity and residual normality. Tests are also carried out to assess the structural stability of the model and its coefficients.

As for model stability, the test graph shows that there is no point outside the red interval, which means that our model is stable.

5. Conclusion

This study provides a detailed analysis of the impact of monetary policy on private investment in Morocco over the period 2000–2023, leveraging a robust econometric methodology centered on the Vector Error Correction Model (VECM). By utilizing unit root and cointegration tests, we examined the intricate relationships between private investment and vital macroeconomic variables such as economic growth, foreign direct investment (FDI), interest rates, inflation, tax burden, exchange rates, and money supply.

The descriptive analysis highlighted key trends and variability among these variables, underlining their critical roles in shaping private investment decisions. The econometric results reveal differentiated short- and long-term impacts of monetary policy instruments on investment. In the short term, economic growth emerges as the primary driver of private investment, emphasizing the significance of a strong and stable economic foundation to bolster investor confidence and spur investment. Additionally, liquidity plays a notable supportive role, indicating the importance of accessible financial resources in driving short-term investment activities.

In the long term, sustained economic growth, FDI inflows, and macroeconomic stability are identified as essential drivers of private investment, demonstrating their foundational role in creating a favorable climate for long-term capital formation. However, tax burden and elevated interest rates act as significant barriers to investment, highlighting the necessity for fiscal reform and a judicious approach to monetary policy to address these constraints. Interestingly, the analysis revealed a negative impact of money supply on private investment, suggesting possible inefficiencies in the allocation of financial resources or a preference for channeling liquidity into non-productive assets.

Ensuring a stable exchange rate is paramount for reducing uncertainties and fostering an investment-friendly environment. Maintaining moderate inflation levels can enhance investor confidence by preserving purchasing power and reducing financial risks. Interest rate policies must be designed to encourage productive investments while ensuring financial system stability. Reducing the tax burden on businesses, particularly for small and medium enterprises (SMEs), can catalyze private sector investment and economic dynamism. Enhancing the efficiency of financial markets to direct liquidity toward productive sectors is crucial for addressing the observed negative effects of money supply.

5.1. Broader Perspective

The study underscores the interconnectedness of monetary policy with broader economic conditions, including external shocks, structural weaknesses, and institutional inefficiencies. A coordinated approach that integrates both monetary and fiscal policies is necessary to amplify the effectiveness of monetary interventions. This comprehensive strategy can foster an environment conducive to private sector growth, innovation, and sustainable economic resilience, ultimately driving Morocco toward its long-term development goals.

5.2. Future Research

Future research could explore sector-specific investment dynamics to uncover how monetary policy impacts industries differently. Additionally, examining the interaction between monetary policy and structural reforms could yield valuable insights into designing holistic policies that promote inclusive and sustainable private investment.

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