

# Relationship Between Macroeconomic Stability and Private Investment Flows: Evidence from An Emerging Country (Peru, 1991-2022)

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## Abstract

This study investigates the relationship between macroeconomic stability and private investment flows in Peru between 1991 and 2022. The analysis addresses a key policy question for emerging economies: how fluctuations in growth, inflation, fiscal deficits, and exchange rates influence investor behavior and long-term capital formation. Using annual time-series data from the Central Reserve Bank of Peru, the study applies unit root tests, cointegration analysis, and error correction models (ECM) to examine both short-term adjustments and long-term equilibrium relationships. The methodological choice highlights the advantages of dynamic econometric techniques over correlational approaches used in prior studies. The findings indicate that GDP growth has a strong positive effect on private investment: a 4% rise in GDP is associated with a 6% increase in private investment. Exchange rate stability also matters, with private investment rising 0.57% for every 1% increase in the exchange rate. In contrast, inflation and large fiscal deficits exert a dampening effect on investment. These results align with Tobin's Q theory of investment, neoclassical perspectives on capital accumulation, and Keynesian arguments about uncertainty. The results underscore those stable macroeconomic conditions, particularly fiscal discipline and controlled inflation, create a favorable climate for entrepreneurs, lenders, and foreign investors. Beyond economics, these findings have implications for accounting and financial reporting, as fiscal credibility and deficit management influence corporate disclosures, investor risk assessments, and capital allocation decisions. Peru's experience demonstrates how macroeconomic stability fosters sustained private investment, with lessons applicable to other emerging economies in Latin America and beyond.

**Keywords:** *Developing, Economic Stability; Macroeconomic, Private Investment, Political.*

## 1. Introduction

The link between macroeconomic stability and private investment flows is a major concern for developing countries in today's capital-intensive and politically unstable world. A case in point is Peru, which has welcomed international investment and maintained a sound macroeconomic system for the past 30 years (1991–2022). Controlling inflation, efficient public debt management, and a proven exchange rate are essential components of investor confidence, according to previous research. However, the relative weight of these elements in shock-prone economies is still a matter of debate (Kurecic & Kokotovic, 2017). This article offers empirical data on the influence of Peruvian macroeconomic stability on private investment flows, with the aim of contributing to the international debate on policies to boost sustainable growth in developing economies.

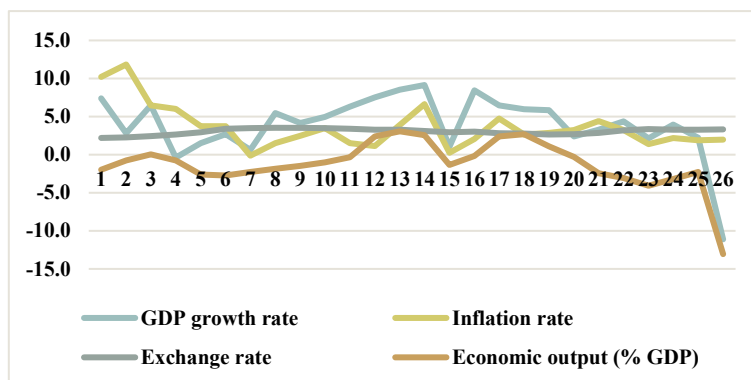
To frame this analysis, it is useful to draw on established theories of investment behavior, which help explain how macroeconomic stability influences investment decisions. This relationship can be framed through several theoretical perspectives. From the neoclassical view, higher output growth and capital accumulation encourage private investment. According to Tobin's Q theory, firms increase investment when the market value of capital exceeds its replacement cost, implying that growth prospects drive capital formation (Virlics, 2013). In contrast, Keynesian approaches emphasize uncertainty: instability in inflation, fiscal policy, or exchange rates undermines investor confidence and discourages long-term commitments. These perspectives guide the present study's hypotheses on GDP, inflation, fiscal deficit, and exchange rate impacts on private investment in Peru.

Earlier studies often relied on correlational approaches or VAR models that capture short-run dynamics but not long-run equilibrium. By applying cointegration and error correction models (ECM), this study provides evidence of both short-run adjustments and long-run stability, underscoring its novelty and contribution to the literature. Building on these theoretical and methodological foundations, prior research identifies a range of macroeconomic factors that shape private investment in developing economies. According to Meka'a et al.

(2024), these include the exchange rate, GDP, real interest rates, public investment, credit availability, foreign debt size, and overall macroeconomic stability.

Globally, private investment has expanded under conditions of growth and openness but remains highly vulnerable to shocks such as political instability, climate change, and global recessions (Awan & Yaqoob, 2023). For emerging economies, these risks amplify financial stress and reduce capital inflows, as seen during the COVID-19 pandemic. Against this global backdrop, Peru provides a relevant case where post-1990 reforms stabilized key indicators and attracted sustained private investment.

For emerging economies, global downturns often manifest in reduced foreign investment, declining exports, and tighter aid flows, which amplify financial vulnerability (Gao et al., 2023). Against this backdrop, Peru provides a relevant case for examining how macroeconomic stability influences private investment. To operationalize stability, we track sustained real output growth, low and predictable inflation, and a sustainable external balance. On the investment side, private investment is assessed by its ratio to GDP, long-run trends as a signal of confidence, and its quality measured by allocations to infrastructure, industry, and services, as well as contributions to research, innovation, and job creation.



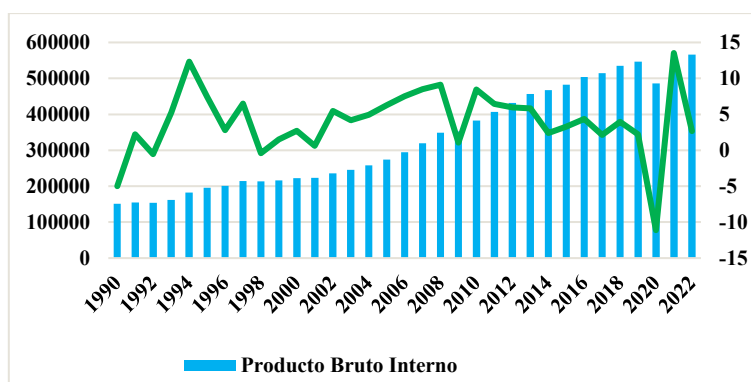
**Fig. 1:** Indicators of Macroeconomic Stability Improved Markedly After the 1990 Reforms, Though Vulnerability Persisted During Global Crises.

Note: The figure shows the main indicators of macroeconomic stability: 1990 – 2020. Taken from the CRBP, 2024.

Over the past three decades, Peru has achieved significant improvements in macroeconomic stability and private investment. The economy has maintained steady expansion, low and controlled inflation, a healthy balance of payments, and comparatively low interest rates. Private investment has risen markedly, accounting for nearly 80% of national investment (Bibi & Valdecantos, 2023).

Nonetheless, several structural challenges continue to hinder growth. Persistent political uncertainty undermines business confidence, widespread informality constrains productivity and tax collection, and corruption increases operating costs and investment risks. Addressing these issues through stronger institutions, reduced informality, and improved governance is essential to sustaining economic stability and maintaining investor confidence.

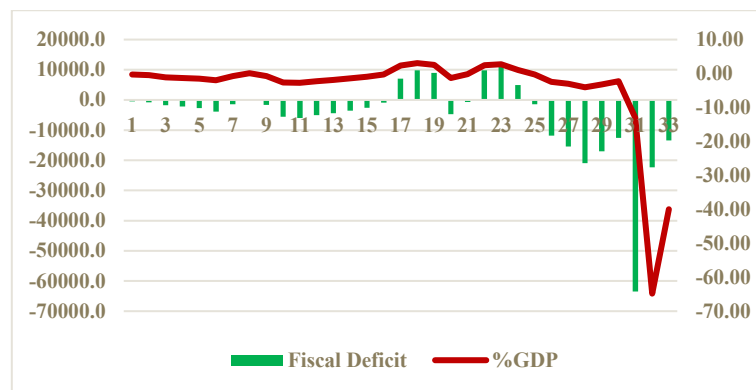
While vulnerabilities remain, the long-term trajectory of Peru's economy has been broadly positive, with macroeconomic indicators and private investment following relatively stable paths (Spyromitros & Panagiotidis, 2022). The country's GDP growth performance over the past three decades illustrates the resilience of its macroeconomic framework, even in the face of external shocks.



**Fig. 2:** GDP Rebounded Strongly Post-2008 Crisis but Contracted Sharply in 2020 with COVID-19.

Note: The figure shows the behavior of GDP from 1990 to 2022. Taken from the CRBP, 2024-Statistical Series.

Over the past three decades, Peru's GDP has followed a generally positive trajectory, though punctuated by significant fluctuations. Following the 1990 stabilization program, the economy contracted in 1991 but rebounded strongly in the mid-1990s, peaking at 12.3% growth in 1994. The country's reliance on exports sustained steady expansion through the late 1990s and early 2000s. The 2008–2009 global financial crisis interrupted this pattern, with GDP falling to just 1% growth in 2009, before recovering with an 8.5% rebound in 2010 (Jalles et al., 2024). From 2011 to 2014, annual growth averaged around 6%, though it slowed to 2.4% in 2014 as external demand weakened. The most severe downturn occurred during the COVID-19 pandemic, when GDP contracted by 11.1% in 2020, underscoring the country's vulnerability to global shocks.

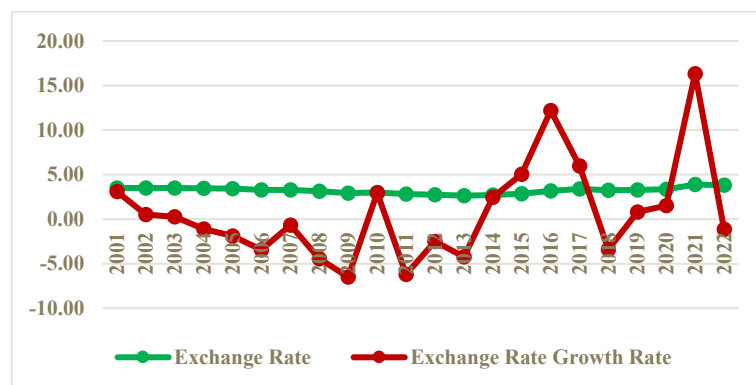


**Fig. 3:** Fiscal Deficits Remained Moderate Through the 2000s, But Pandemic-Related Spending in 2020 Led to An Unprecedented Shortfall.

Note: The figure shows the behavior of the fiscal deficit relative to GDP. Taken from the CRBP, 2024 - Statistical Series.

The fiscal deficit, measured as the balance between government revenues and expenditures relative to GDP, has fluctuated considerably over the past three decades, though it generally remained within limits considered sustainable by economic theory (2–3% of GDP) (Hartley-Ballester, 2021). In the early 1990s, the deficit was modest, averaging around –0.3 to –0.5% of GDP, reflecting the initial effects of Peru’s stabilization efforts. By the mid-2000s, fiscal discipline and favorable commodity prices allowed the government to achieve small surpluses, peaking at over 3% of GDP in 2007. This period of prudent fiscal management provided an important buffer against external shocks and reinforced macroeconomic stability.

The fiscal balance reflected global shocks and domestic policy responses over time. During the 2009–2010 global financial crisis, Peru’s deficit widened briefly but quickly narrowed to sustainable levels (–1.3% in 2009 and –0.2% in 2010), demonstrating prudent fiscal management. This discipline, supported by high commodity revenues, enabled the government to post consecutive surpluses between 2011 and 2013, strengthening macroeconomic credibility. However, since 2014, deficits have trended upward as rising public spending and weak revenue collection have placed pressure on the budget. By 2019, the deficit had reached over 2% of GDP, reflecting growing social demands and structural limitations in tax collection. The COVID-19 pandemic marked an unprecedented shock: emergency spending pushed the deficit to –13% of GDP in 2020, the highest in Peru’s modern history, highlighting both the government’s countercyclical response and the economy’s vulnerability to external crises.



**Fig. 4:** The Exchange Rate Stabilized After the 2000s, Though Depreciation Pressures Re-Emerged with Global and Domestic Shocks.

Note: The figure shows the behavior of the exchange rate and the GDP growth rate from 2001 to 2022. Taken from the CRBP, 2024.

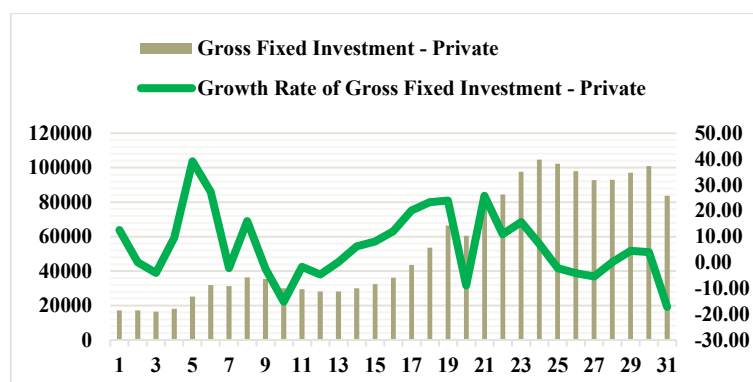
Peru’s exchange rate dynamics over the past two decades reflect a combination of external shocks and domestic stabilization policies. At the beginning of the 2000s, the sol traded around 3.5 per dollar and remained broadly stable for several years, reinforcing investor confidence. Between 2004 and 2009, the currency appreciated to 2.93 per dollar, supported by strong export revenues, before weakening again during the global financial crisis. A renewed appreciation brought the sol to a 20-year low of 2.64 per dollar in 2013, but from 2014 onward the exchange rate depreciated steadily, reaching 3.38 in 2017. By the end of 2022, it stood at 3.34 per dollar. These fluctuations underline both the vulnerability of the sol to global shocks and the importance of exchange-rate stability as a determinant of private investment and macroeconomic confidence.



**Fig. 5:** Inflation Fell from Hyperinflation in the Early 1990s To Single Digits But Spiked Again in 2021–22 During COVID-19 and Political Instability.

Note: The figure shows the behavior of the inflation rate from 1990 to 2022. Taken from the CRBP, 2024.

Inflation in Peru has undergone dramatic shifts over the past three decades. At the start of the 1990s, hyperinflation reached an unprecedented 7,649%, severely eroding purchasing power and undermining confidence in the economy. The “economic shock” policies of the Fujimori administration gradually curbed this crisis, with inflation falling to double digits by the mid-1990s and reaching 6.5% in 1997. Since then, Peru has maintained single-digit inflation, largely within the Central Reserve Bank’s target of around 3%, which contributed to macroeconomic stability and investor confidence. Periods of stability included a brief deflationary episode in 2001 (–0.1%), reflecting the credibility of monetary policy. However, recent shocks have tested this stability: inflation spiked to 6.4% in 2021 and 8.5% in 2022, driven by the COVID-19 crisis and heightened political uncertainty. These episodes underscore both the success of long-term stabilization and the ongoing vulnerability of Peru’s price system to external and domestic shocks.



**Fig. 6:** Private Investment Grew Steadily Until 2014, Then Slowed Amid Political Uncertainty and Declined Sharply with the COVID-19 Shock.

Note: The figure shows the behavior of private investment (PI) and the growth rate of private investment (PIGR) from 1990 to 2022. Taken from the Central Reserve Bank of Peru.

Private investment in Peru has fluctuated considerably over the past three decades, making it highly sensitive to macroeconomic stability. After early volatility in the 1990s, investment rebounded strongly, rising nearly 40% in 1994 alone and reaching close to 17% of GDP by the late 1990s. This momentum was sustained into the 2000s, with investment levels remaining stable around 36 billion soles through mid-decade. A major structural milestone was achieved in 2013, when private investment surpassed 100 billion soles, equivalent to more than 22% of GDP, reflecting strong growth in construction, industry, and services. Although this level was largely maintained in 2014, subsequent years brought new challenges, as investment growth began to slow amid rising uncertainty.

Macroeconomic stability refers to low and predictable variability in core aggregates output, inflation, the fiscal balance, and the external account. When such stability prevails, households and firms face lower uncertainty and are more willing to spend and invest, reducing the perceived risk of severe downturns (Struckell et al., 2022). In turn, stronger spending and investment support sustained growth, job creation, and innovation. While private investment has been a key driver of global growth, it remains vulnerable to shocks such as political instability, climate change, and pandemics. For emerging economies, these risks amplify financial stress and reduce capital inflows, as shown during the COVID-19 pandemic.

Against this global backdrop, Peru offers a relevant case where post-1990 reforms stabilized key indicators and attracted sustained private investment. To operationalize macroeconomic stability in Peru, we track sustained real output expansion, low and predictable inflation that preserves purchasing power, and a sustainable external balance consistent with a stable balance of payments (Zhang et al., 2023).

These dynamics also carry direct implications for accounting and financial reporting. Fiscal deficits and inflation shape investor risk assessments and corporate disclosures, while exchange-rate volatility affects financial statements and hedging strategies. Taken together, these intersections highlight the role of macroeconomic stability not only in sustaining investment but also in shaping the transparency, credibility, and information environment of financial markets (Ogundu, 2025). In this context, private investment serves as both a driver and a barometer of stability, reflecting how macroeconomic policies translate into business confidence and capital formation.

## 2. Literature Review

The international literature has extensively examined the relationship between macroeconomic stability and private investment flows. At the same time, critics of Peru’s neoliberal reforms argue that while stabilization anchored prices and attracted FDI, it also reinforced

commodity dependence, widened informality, and increased vulnerability to external shocks (Aseeva, 2018). These perspectives highlight the dual nature of stabilization policies supporting growth, yet exposing structural weaknesses.

Specifically, emphasizes that stability in core indicators strengthens investor confidence, while Dinh et al. (2024) highlight controlled inflation, a sustainable fiscal deficit, and exchange-rate stability as critical determinants of capital attraction. In the context of emerging economies, several studies show that institutional credibility and predictable macroeconomic policies reduce the risk perceived by investors. For Latin America, the evidence indicates that macroeconomic volatility discourages foreign direct investment (FDI). In the Peruvian case, examine the impact of the 1990s reforms on FDI attraction Siddik, (2023), but a gap remains in long-term quantitative studies that assess the dynamic interaction between macroeconomic stability and private investment flows. Despite Peru's reputation for macroeconomic stabilization since the 1990s, there is limited empirical evidence on how sustained stability has interacted with domestic private investment; this study addresses that gap.

It investigates the stagnation of private investment in Mexico between 2005 and 2022, situating it within the broader macroeconomic context and episodes of crisis such as the global financial crisis (2008–2009) and the COVID-19 shock (2020–2022). The study identifies the main structural and cyclical factors influencing investment performance and its contribution to growth. Using a three-lag VAR model, Aguilar (2021) explores the interrelationships among GDP, savings, wages, interest rates, the exchange rate, financialization, and both private and public investment. The findings indicate that private investment stagnated for multiple, interlinked reasons: a declining share of public investment, persistent currency weakness, rising interest rates, negative feedback loops between falling investment and stagnant commodity prices, and depressed real wages. These studies rely on VAR-based models, which capture short-run dynamics but not long-run equilibrium. By Ortiz et al. (2022), contrast, our study applies cointegration and ECM to reveal both short-run adjustments and long-run stability, filling a methodological gap for Peru.

To analyze the determinants of exchange-rate dynamics and show that certain sectors in Latin America have historically benefited from political and economic agreements that shaped currency policy. From a policy perspective, this highlights how exchange-rate arrangements can redistribute advantages across actors. Although international organizations and large financial groups have long promoted greater flexibility in exchange-rate regimes (Nayar et al., 2024), empirical experience suggests that this approach has not consistently delivered the intended stability.

Mexico's exchange-rate management illustrates the trade-offs of state intervention. Policies of currency depreciation and wage repression supported export competitiveness but came at the expense of household welfare (Wei & Wang, 2025; Ramoni-Perazzi & Romero, 2022). At the same time, efforts to maintain currency stability to attract financial capital limited the scope for independent policy decisions, leaving the system vulnerable to external pressures. While short-term measures provided temporary relief, sustainable growth requires a longer-term strategy grounded in stronger institutions, investment in education, and technological upgrading. Such reforms would enhance productivity and value creation, ultimately improving competitiveness without relying on distortionary measures.

It examines the impact of macroeconomic volatility on private investment in Ecuador between 1987 and 2022, focusing on real GDP, the real exchange rate, inflation, and the non-oil primary balance. Private investment is proxied by gross fixed capital formation. Using an econometric framework suited for time-series volatility, Madurapperuma (2022), the study finds a negative and statistically significant effect of macroeconomic instability on investment. This evidence supports theoretical expectations that heightened volatility discourages firms from undertaking irreversible projects, as uncertainty about the macroeconomic environment raises risk premia and leads investors to demand higher returns before committing capital.

To analyze Argentina's 2019 exchange-rate crisis through the lens of financial fragility in open, peripheral economies. The study shows how recent changes in banking regulation affected long-standing imbalances. Since 2015, exchange-rate and banking deregulation, coupled with weak macroprudential frameworks, excessive external debt, high inflation, and persistent balance-of-payments deficits, have heightened Argentina's external vulnerability (Saungweme & Odhiambo, 2018). To sustain dollar demand, the government increasingly relied on short-term portfolio inflows offering high returns exceeding 12% in 2016 and on public borrowing, policies that provided temporary relief but deepened financial fragility. This case underscores how policy reliance on short-term external financing, rather than structural reforms, can undermine stability in emerging economies. Taken together, these cases illustrate that while short-term fixes such as depreciation, deregulation, or capital inflows may offer temporary relief, they often amplify volatility. This reinforces the importance of long-term stabilization frameworks, such as those analyzed in the Peruvian case.

Research on uncertainty has sought to clarify its definition and measurement across both microeconomic and macroeconomic contexts (Kim & Gamble, 2022). At the same time, theoretical work has explored how investment behavior responds to uncertainty at both aggregate and firm levels (Hilton, 2021). Iona et al. (2024) emphasize that the assumptions embedded in models, as well as the evolution of investment theory itself, strongly shape outcomes. Similarly, Erdoğan et al. (2025) show that empirical findings vary depending on factors such as econometric specification, time horizon, and country characteristics. Overall, most evidence suggests that uncertainty exerts a negative short-run effect on private investment, while the medium- to long-run effects remain ambiguous and depend heavily on institutional quality and structural conditions. Thus, the effect of uncertainty depends on time horizon and institutional context. Fischer & Storm (2023) argue that since the 1970s, developing nations have relied heavily on external borrowing to finance public spending and investment, a pattern that has often resulted in high debt burdens and slower economic development. In the Peruvian context, one study examined the relationship between economic growth (2000–2021) and external vulnerability, measured as the ratio of external public debt to total exports, using quarterly data from the Central Reserve Bank of Peru (BCRP, 2024) and the National Tax Administration Service (SUNAT). Employing a vector autoregressive (VAR) model, the analysis considered the interaction of external vulnerability, consumption, investment, and tax revenue. The results suggest that while investment and tax revenue positively influenced growth, external vulnerability exerted a negative effect on GDP, highlighting the risks of overreliance on debt financing.

Private investment is a critical driver of economic development in Peru, yet it remains highly volatile in the face of political and macroeconomic instability (Burgess et al., 2021). Research consistently points to a negative relationship between uncertainty and investment, explained theoretically by two mechanisms: risk aversion, which makes investors reluctant to commit capital in uncertain environments, and investment irreversibility, which raises the cost of delaying or reversing projects. Empirical studies for developing countries confirm that both macroeconomic and political uncertainty significantly depress private investment. Inflation and the real exchange rate are widely used indicators of macroeconomic uncertainty, while political risk, institutional quality, and government capacity capture political dimensions. This evidence suggests that stabilizing these factors is essential for sustaining investment and growth. Interdisciplinary work connects macroeconomic variables to accounting and reporting practices. Fiscal deficits shape disclosure demands and risk reporting, inflation affects valuation and impairment tests, and exchange-rate volatility influences hedge accounting and financial statement translation (Onitekun & Ogun, 2024). These insights justify including fiscal balance and exchange rate alongside GDP and inflation in the empirical model. For Peru, this approach is particularly important, as stability influences not only growth and investment but also the information environment for firms and investors

However, for Peru, there is still no comprehensive econometric analysis that jointly examines the effects of both macroeconomic and political uncertainty, leaving an important gap that this study aims to address.

Private investment remains a central driver of growth in developing economies, even amid macroeconomic and political uncertainty. This stream of literature examines how uncertainty affects investment from both theoretical and empirical perspectives. Theoretically, outcomes may be positive or negative depending on assumptions about profitability, risk aversion, competitiveness, and the irreversibility of investments (Ramírez et al., 2019). However, most empirical evidence points to a negative association: uncertainty in the real exchange rate, terms of trade, political stability, and broader sociopolitical conditions tends to reduce private investment in emerging markets. This underscores the importance of policy frameworks that can anchor expectations and minimize volatility to sustain investment-led development.

### 3. Methods

#### 3.1. Research design

This study is applied in purpose and quantitative in approach. It is descriptive and correlational, seeking to explain the relationships among variables rather than manipulate them. Because it does not involve experimental manipulation of independent variables, it is classified as non-experimental. Instead, the study observes and analyzes phenomena in their natural settings. The data design is longitudinal, covering the period from 1990 to 2022.

#### 3.2. Variables and data sources

The variables analyzed include private investment, gross domestic product (GDP), fiscal deficit, exchange rate, inflation, and the public debt-to-GDP ratio. Data were collected from official statistical sources, including the Central Reserve Bank of Peru (BCRP), the National Tax Administration Service (SUNAT), and international time series databases. Private investment and GDP were measured in U.S. dollars, while capital flows were expressed in current dollars.

#### 3.3. Data analysis tools

Annual historical series were used for all variables. To ensure comparability and accuracy, unit root tests were applied to check stationarity properties. The econometric software EViews (version 14.0) was used for data processing and analysis.

#### 3.4. Econometric approach

The analysis applies time-series econometric techniques, focusing on cointegration and the error correction model (ECM). Bivariate cointegration methods were employed to evaluate long-run equilibrium relationships between macroeconomic stability indicators and private investment. Univariate non-stationarity analyses were conducted to ensure robustness of the series. This design allows the study to capture both short-run adjustments and long-run dynamics, addressing the methodological gaps identified in the literature, where many prior studies relied mainly on correlational or VAR models.

## 4. Results

#### 4.1. Unit root tests

Table 1 reports the results of the Augmented Dickey-Fuller and Phillips-Perron tests. Most variables were non-stationary in levels but became stationary in first differences, confirming their order of integration as I (1). This finding justifies the application of cointegration techniques.

**Table 1:** Unit Root Test of the Statistical Series

Test		In levels				
		PIr	GDP	FD	ER	INF
Augmented Dickey-Fuller Test	t-statistic	-0.257454	0.352092	-3.040381	-2.921275	-25.80939
	Prob*	0.9203	0.9773	0.0421	0.0547	0.0001
	Integration	I(1)	I(1)	I(1)	I(1)	I(1)
Phillips-Perron test	t-statistic	-0.131325	0.352092	-5.354018	-4.132718	-34.10285
	Prob*	0.9372	0.9773	0.0001	0.0031	0.0001
	Integration	I(1)	I(1)	I(1)	I(0)	I(0)
Test		In first differences				
		PIr	GDP	FD	ER	INF
Augmented Dickey-Fuller Test	t-statistic	-6.558193	-7.131223	-3.003207	-3.042237	-7.570466
	Prob*	0.0000	0.0000	0.0456	0.0423	0.0000
	Integration	I(0)	I(0)	I(0)	I(0)	I(0)
Phillips-Perron test	t-statistic	-6.500263	-7.210964	-11.27509	-2.880189	-16.62824
	Prob*	0.0000	0.0000	0.0000	0.0596	0.0001
	Integration	I(0)	I(0)	I(0)	I(0)	I(0)

#### 4.2. General regression model

The general model (Table 2) shows that GDP and the exchange rate exert strong influences on private investment. GDP displays a positive coefficient ( $\beta_1 = 0.2601$ ), consistent with neoclassical and Tobin's Q perspectives, where output growth stimulates investment. Conversely, the exchange rate carries a negative coefficient ( $\beta_2 = -7993.8$ ), suggesting that depreciation increases uncertainty and deters investment. Inflation also has a negative effect, while fiscal balance is positively related to investment, underscoring the importance of fiscal discipline for investor confidence.

**Table 2:** Regression Results of the General Model

$PIR_t = \beta_0 + \beta_1 GDP_t + \beta_2 ER_t + \beta_3 INF_t + \beta_4 FD_t + \mu_{1t}$					
The General Model	$\beta_0$	$\beta_1$	$\beta_2$	$\beta_3$	$\beta_4$
	-1972.99	0.2601	-7993.8	-155.34	103163

### 4.3. Long-term relationships

Tables 3 and 4 present the cointegration estimates. Results confirm that:

- GDP has a significant positive long-run relationship with private investment ( $\beta_1 = 1.44$ ).
- Fiscal deficits reduce private investment ( $\beta_1 = -2.49$ ), highlighting how persistent deficits erode confidence and may raise risk premiums in capital markets. This also links to accounting practice, since deficits affect public reporting and investor disclosure.
- Exchange rate stability encourages investment ( $\beta_1 = 0.57$ ), while inflation negatively impacts investment ( $\beta_1 = -491.6$ ), consistent with Keynesian uncertainty arguments.

**Table 3:** Approach to Long-Term Econometric Models

Variables	Models
Log GDP	$\log(PIR_t) = \beta_0 + \beta_1(GDP_t) + \mu_{1t}$
Fiscal Deficit (FD)	$\log(PIR_t) = \beta_0 + \beta_1 FD_t + \mu_{1t}$
Exchange Rate (ER)	$\log(PIR_t) = \beta_0 + \beta_1 \log(ER_t) + \mu_{1t}$
Inflation (INF)	$\log(PIR_t) = \beta_0 + \beta_1 \log(INF_t) + \mu_{1t}$

**Table 4:** Results of the Estimation of the Models

Models	Private Investment	
Log GDP	$\beta_0 = -7.403779$	$\beta_1 = 1.441470$
Fiscal Deficit	$\beta_0 = 10.78735$	$\beta_1 = -2.491533$
Exchange Rate	$\beta_0 = 10.23856$	$\beta_1 = 0.0295$
Inflation	$\beta_0 = 3392.82$	$\beta_1 = -491.5889$

### 4.4. Short-term dynamics (ECM results)

Tables 5 and 6 summarize the error correction models. In the short run:

- GDP growth remains a key driver of investment ( $\beta_1 = 2.55$ ), but the error correction term ( $\lambda = -0.16$ ) indicates a moderate speed of adjustment toward equilibrium.
- Fiscal balance has a positive short-run effect ( $\beta_1 = 0.73$ ), with a high adjustment coefficient ( $\lambda = 0.95$ ), suggesting quick correction when deviations occur.
- Exchange rate and inflation both negatively affect private investment in the short term, with error correction terms confirming convergence to the long-run equilibrium.

**Table 5:** Approach to Short-Term Econometric Models

Variables	Models
Log GDP	$\log(PIR_t) = \beta_0 + \beta_1 D((GDP_t)) + \lambda \mu_{1t-1}$
Fiscal Deficit	$D(\log(PIR_t)) = \beta_0 + \beta_1 D(FD_t) + \lambda \mu_{1t-1}$
Exchange Rate	$D(\log(PIR_t)) = \beta_0 + \beta_1 D((ER_t)) + \lambda \mu_{1t-1}$
Inflation	$\log(PIR_t) = \beta_0 + \beta_1 D(\log(INF_t)) + \lambda \mu_{1t-1}$

**Table 6:** Results of the Estimation of the Short-Term Models or Error Correction Models

Models	Private Investment		
Log GDP	$\beta_0 = -0.045047$	$\beta_1 = 2.551002$	$\lambda = -0.164658$
Fiscal Deficit	$\beta_0 = 10.89003$	$\beta_1 = 0.734179$	$\lambda = 0.957499$
Exchange Rate	$\beta_0 = 0.061919$	$\beta_1 = -0.16748$	$\lambda = -0.058963$
Inflation	$\beta_0 = 0.06318$	$\beta_1 = 0.025127$	$\lambda = -0.46389$

### 4.5. Summary of findings

Overall, the results demonstrate that:

- 1) GDP growth consistently stimulates private investment.
- 2) Fiscal deficits undermine both short- and long-run investment, reinforcing the need for disciplined fiscal management and transparent reporting.
- 3) Exchange rate stability supports investment, but depreciation shocks increase uncertainty.
- 4) Inflation erodes investment confidence by raising costs and uncertainty.

These findings align with the theoretical foundations: neoclassical and Tobin's Q theories explain the GDP-investment link, while Keynesian perspectives account for the negative role of uncertainty via inflation and exchange-rate volatility.

## 5. Discussion

Private investment has shown a strong positive association with Peru's macroeconomic stability, echoing global evidence that investment flows increase in economies characterized by predictable inflation, credible fiscal policy, and sustained growth (Gutiérrez & Moreno, 2021). The empirical results confirm this link: GDP growth significantly stimulates investment, while inflation and exchange-rate volatility reduce it, and fiscal discipline enhances investor confidence. These findings align with neoclassical and Tobin's Q perspectives, where output expansion and profitability expectations drive capital formation, and with Keynesian insights on uncertainty, which highlight the destabilizing role of volatility.

In the short term, shocks such as currency depreciation, inflation spikes, and political uncertainty discourage private investment by increasing financing costs and risk premiums. These dynamics mirror broader regional experiences in Latin America, where temporary fixes such as depreciation or portfolio inflows provided relief but ultimately amplified volatility (Zeolla & Médici, 2022). For Peru, this suggests that immediate policy efforts should focus on stabilizing inflation, ensuring transparent fiscal reporting, and containing political risks to reassure investors.

In the long term, the positive elasticity between GDP and private investment underscores the importance of structural stability. Consistent fiscal discipline and credible debt management not only reduce sovereign risk but also enhance corporate disclosures and investor reporting environments. Likewise, exchange-rate stability lowers uncertainty in hedge accounting and financial statement translation, demonstrating the interdisciplinary intersections between macroeconomic stability and accounting practices (Ofosu-Mensah et al., 2022). These connections are particularly relevant for IJAES, as they show how macroeconomic policies shape both investment flows and information environments.

Peru's experience illustrates that stability has produced tangible outcomes. Private investment grew by an average of 6% annually over the last decade, generating over one million jobs, moderating inflation at 2%, and sustaining GDP growth around 4%. Yet stability alone is insufficient: structural weaknesses, such as informality, commodity dependence, and institutional fragility, remain sources of long-term vulnerability (Tomalá-Quesada et al., 2021). This finding is consistent with critiques of neoliberal reforms that, while anchoring prices, deepened reliance on external demand and widened informality.

Policy implications are therefore twofold. In the short run, Peru must prioritize maintaining macroeconomic discipline, political credibility, and transparent fiscal reporting to anchor investor expectations. In the long run, structural reforms strengthening institutions, diversifying the economy, and fostering innovation are critical to ensure that stability translates into sustained investment-led development (Arroyo-Sánchez et al., 2022). These lessons also provide insights for other emerging markets, such as Chile or Colombia, where similar tensions between stabilization gains and structural vulnerabilities persist.

## 6. Conclusions

This study demonstrates that macroeconomic stability is positively correlated with private investment in Peru, with GDP growth consistently stimulating capital formation and job creation. The findings support neoclassical and Tobin's Q perspectives, showing that output expansion raises profitability expectations, while Keynesian insights explain how uncertainty from inflation and currency volatility deters long-term commitments.

In the short run, inflation and exchange-rate depreciation exert negative effects on private investment, raising costs and uncertainty, while fiscal balance provides quick confidence boosts to markets. These results underscore the importance of short-term policies that control inflation, maintain exchange-rate stability, and improve fiscal transparency to safeguard investor confidence.

In the long run, disciplined fiscal management, sustained GDP growth, and institutional credibility remain the most important anchors of private investment. The empirical evidence confirms that large deficits discourage capital inflows, while stability fosters structural investment, innovation, and employment growth. At the same time, Peru's reliance on commodity exports and exposure to political shocks highlight vulnerabilities that must be addressed through diversification and institutional reform.

The results also carry implications for accounting and financial reporting. Fiscal deficits affect disclosure practices and investor risk assessments; inflation alters valuation and impairment tests; and exchange-rate fluctuations shape hedge accounting and financial statement translation. These interdisciplinary intersections strengthen the relevance of the study for IJAES, bridging macroeconomic outcomes with corporate reporting environments.

Overall, Peru's experience shows that macroeconomic stability encourages sustained private investment, but only when paired with long-term structural reforms. Policies that combine fiscal discipline, inflation control, and transparent reporting with institutional strengthening and diversification will be crucial to sustain investment-led development in Peru and other emerging economies.

## References

- [1] Aguilar D (2021), The stagnation of private investment in Mexico: an analysis of its determinants in the period 2005–2022. *Trascender, Accounting and Management* 7(20), 34–70.
- [2] Arroyo-Sánchez JL, Chavez-Uscamaita G, Mera-Núñez ME & Vargas-Salazar IY (2022), Crecimiento económico peruano y el efecto marginal de la inversión, 2000–2020. *Transdisciplinary Human Education* 6(10), 1–12. <https://doi.org/10.55364/the.Vol6.Iss10.115>.
- [3] Aseeva A (2018), (Un)Sustainable development(s) in international economic law: A quest for sustainability. *Sustainability*, 10(11), 4022. <https://doi.org/10.3390/su10114022>.
- [4] Awan AG & Yaqoob R (2023), Economic value of introducing technology to improve productivity: An ARDL approach. *Innovation and Green Development* 2(3), 100069. <https://doi.org/10.1016/j.igd.2023.100069>.
- [5] Bibi S & Valdecantos S (2023), The price (and Costs) of macroeconomic stability in Peru: Some lessons on the implications of FDI-driven growth. *Development and Change* 54(5), 1136–1168. <https://doi.org/10.1111/dech.12793>.
- [6] Burgess MG, Carrico AR, Gaines SD, Peri A & Vanderheiden S (2021), Prepare developed democracies for long-run economic slowdowns. *Nature Human Behaviour* 5(12), 1608–1621. <https://doi.org/10.1038/s41562-021-01229-y>.
- [7] Dinh LQ, Oanh TTK & Ha NTH (2024), Financial stability and sustainable development: Perspectives from fiscal and monetary policy. *International Journal of Finance & Economics* 9(2), 1–18. <https://doi.org/10.1002/ijfe.2981>.
- [8] Erdoğan S, Kantarcı T & Yıldırım DÇ (2025), Does economic policy uncertainty affect venture capital investments for OECD countries? *Venture Capital* 27(2), 203–223. <https://doi.org/10.1080/13691066.2023.2270162>.
- [9] Fischer AM & Storm S (2023), The return of debt crisis in developing countries: Shifting or maintaining dominant development paradigms? *Development and Change* 54(5), 954–993. <https://doi.org/10.1111/dech.12800>.
- [10] Gao J, Wang F, Liu B, Liu F & Nielbo KL (2023), Fundamental limits to economic development in developing and underdeveloped countries imposed by global hierarchy. *Structural Change and Economic Dynamics* 68, 298–312. <https://doi.org/10.1016/j.strueco.2023.11.001>.
- [11] Gutiérrez FS & Moreno JC (2021), El impacto de la inversión pública sobre la privada en las entidades federativas de México. *Problemas del desarrollo* 52(206), 61–83. <https://doi.org/10.22201/ieec.20078951e.2021.206.69501>.
- [12] Hartley-Ballesteros R (2021), Different perspectives on economic theory. *Journal of Economic Sciences* 39(1), 71–106. <https://doi.org/10.15517/rce.v39i1.47633>.
- [13] Hilton SK (2021), Public debt and economic growth: contemporary evidence from a developing economy. *Asian Journal of Economics and Banking* 5(2), 173–193. <https://doi.org/10.1108/AJEB-11-2020-0096>.
- [14] Iona A, Leonida L, Limosani M, Patti DMA & Navarra P (2024), Does economic liberalization foster corporate investment? Theory and evidence from US and Canadian firms. *Socio-Economic Planning Sciences* 91, 101776. <https://doi.org/10.1016/j.seps.2023.101776>.



- [15] Jalles JT, Park D & Qureshi I (2024), Public and Private Investment as Catalysts for Growth: An analysis of emerging markets and developing economies with a focus on Asia. *Journal of International Money and Finance* 148, 103166. <https://doi.org/10.1016/j.jimonfin.2024.103166>.
- [16] Kim I & Gamble KJ (2022), Too much or too little information: how unknown uncertainty fuels time inconsistency. *SN Business & Economics* 2(2), 1–33. <https://doi.org/10.1007/s43546-021-00189-9>.
- [17] Kurecic P & Kokotovic F (2017), The relevance of political stability on FDI: A VAR analysis and ARDL models for selected small, developed, and instability threatened economies. *Economies* 5(3), 22. <https://doi.org/10.3390/economies5030022>.
- [18] Madurapperuma W (2022), The dynamic relationship between economic crisis, macroeconomic variables and stock prices in Sri Lanka. *Journal of Money and Business* 3(1), 25–42. <https://doi.org/10.1108/JMB-06-2022-0033>.
- [19] Meka'a CB, Fotso SR & Kamdem BRG (2024), Investments in basic public infrastructure and their effects on economic growth in a developing country: The case of Cameroon. *Heliyon* 10(4), e26504, 1–9. <https://doi.org/10.1016/j.heliyon.2024.e26504>.
- [20] Nayar N, Price SM & Shen K (2024), Macroeconomic uncertainty and predictability of real estate returns: the impact of asset liquidity. *Journal of Real Estate Research* 46(1), 82–113. <https://doi.org/10.1080/08965803.2023.2211812>.
- [21] Ofosu-Mensah J, Aboagye AQ, Barnor C & Agyei SK (2022), Foreign and domestic private investment in developing and emerging economies: A review of literature. *Cogent Economics & Finance* 10(1), 2132646. <https://doi.org/10.1080/23322039.2022.2132646>.
- [22] Ogundu NPG (2025), The strategic implications of financial derivatives in hedging corporate exposure to global economic volatility. *World Journal of Advanced Research and Reviews*, 25(2), 1218–1234. <https://doi.org/10.30574/wjarr.2025.25.2.0482>.
- [23] Onitekun O & Ogun O (2024), Investment uncertainties and economic growth in Sub-Saharan Africa. *Global Studies Quarterly* 4(1), 1–15. <https://doi.org/10.1093/isagsq/ksae005>.
- [24] Ortiz E, Sosa M & Cabello A (2022), Riesgo e incertidumbre del peso mexicano a largo plazo (1934-2018) - testimonio sobre 14 sexenios. *Abanico veterinario* 1(42), 207–234.
- [25] Ramírez EH, Maguñá ME & Huerta RM (2020), Attitude, satisfaction and loyalty of customers in Municipal Savings Banks of Peru. *Retos* 10(20), 313–325.
- [26] Ramoni-Perazzi J & Romero H (2022), Exchange rate volatility, corruption, and economic growth. *Heliyon* 8(12), e12328. <https://doi.org/10.1016/j.heliyon.2022.e12328>.
- [27] Saungweme T & Odhiambo NM (2018), The impact of public debt on economic growth: A review of contemporary literature. *The Review of Black Political Economy* 45(4), 339–357. <https://doi.org/10.1177/0034644619833655>.
- [28] Siddik MNA (2023), Does macroeconomic stability promote economic growth? Some econometric evidence from SAARC countries. *Asian Journal of Economics and Banking* 7(3), 358–379. <https://doi.org/10.1108/AJEB-05-2022-0052>.
- [29] Spyromitros E & Panagiotidis M (2022), The impact of corruption on economic growth in developing countries and a comparative analysis of corruption measurement indicators. *Cogent Economics & Finance* 10(1), 1–30. <https://doi.org/10.1080/23322039.2022.2129368>.
- [30] Struckell E, Ojha D, Patel PC & Dhir A (2022), Strategic choice in times of stagnant growth and uncertainty: An institutional theory and organizational change perspective. *Technological Forecasting and Social Change* 182, 121839. <https://doi.org/10.1016/j.techfore.2022.121839>.
- [31] Tomalá-Quesada IM, Yagual-Fierro BJ, Uriguen-Aguirre PA & Moreno-Sotomayor GR (2021), Ecuador, Peru, and Colombia: factors affecting foreign direct investment during the 2000-2020 period. *Knowledge Pole* 6(9), 131–152.
- [32] Virlics, A. (2013), Investment decision making and risk. *Procedia Economics and Finance*, 6, 169–177. [https://doi.org/10.1016/S2212-5671\(13\)00129-9](https://doi.org/10.1016/S2212-5671(13)00129-9).
- [33] Wei X & Wang Y (2025), Exploration of the impact of macroeconomic uncertainty on corporate value and investment behavior. *Finance Research Letters* 77, 107021. <https://doi.org/10.1016/j.frl.2025.107021>.
- [34] Zeolla NH & Médici F (2022), Desregulación, endeudamiento y fragilidad financiera externa: un enfoque minskiano para la crisis argentina 2018-2019. *Ensayos de Economía* 32(60), 66–90. <https://doi.org/10.15446/ede.v32n60.100376>.
- [35] Zhang S, Yang L & Cao S (2023), Neglected negative consequences of using exports to earn foreign exchange. *Research in Globalization* 7, 100148. <https://doi.org/10.1016/j.resglo.2023.100148>.